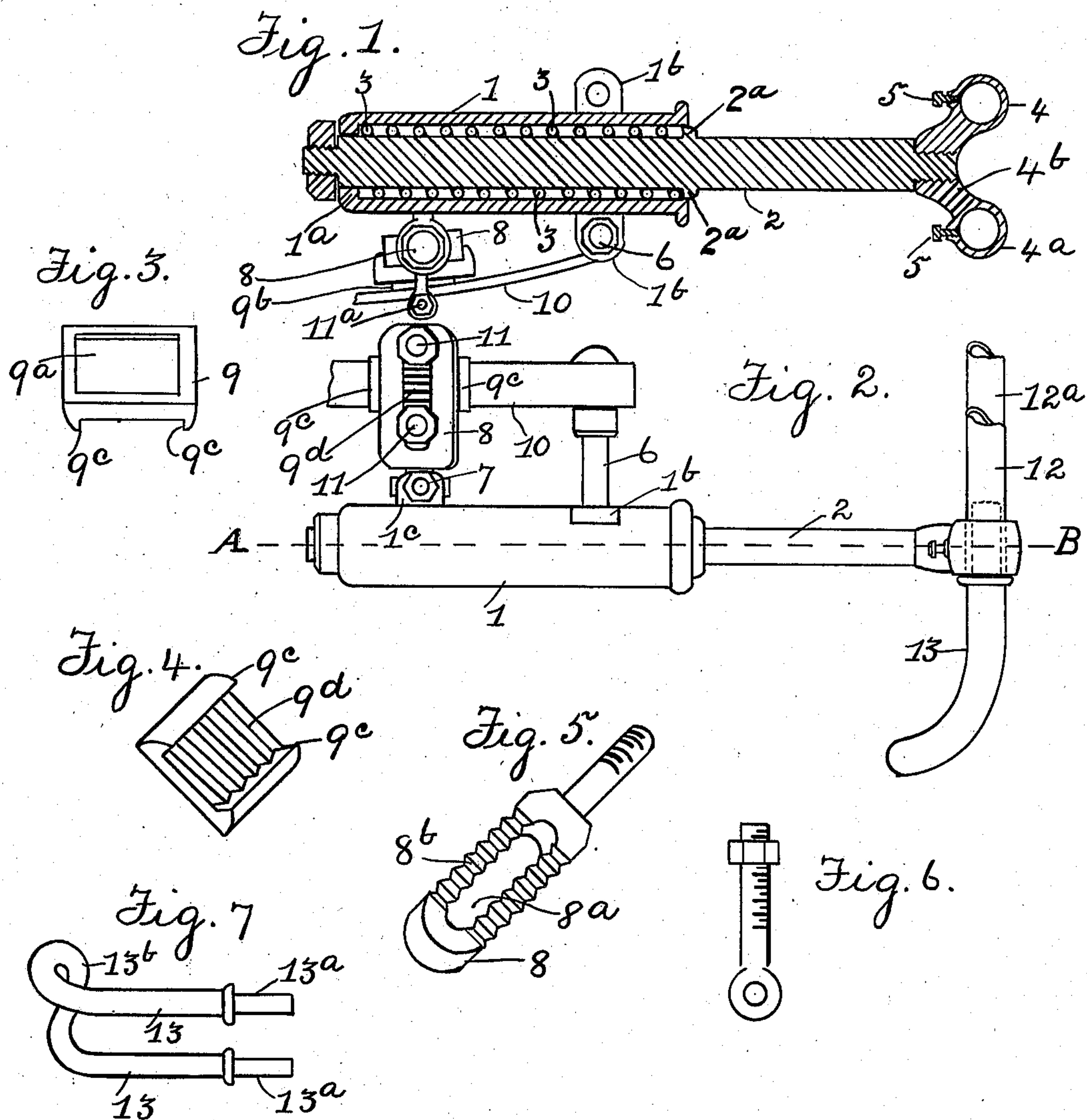


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FENDER FOR VEHICLES.
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908,025.

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FENDER FOR VEHICLES.

No. 908,025.

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To all whom it may concern:

Be it known that I, ALLAN L. MCGREGOR, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Fenders for Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to fenders and has for its object the provision of an improved fender adapted for use upon automobiles and to absorb the impact of a collision occurring at the front of the vehicle.

It consists of the constructions, combinations and arrangements of parts hereinafter described and claimed.

In the drawings, Figure 1, is a vertical longitudinal section of my invention on the line A—B of Fig. 2. Fig. 2, is a top plan view of the same, partly broken away. Fig. 3, is a perspective view of a pedestal or base block viewed from beneath the same. Fig. 4, is a perspective view of said base block viewed from above the same. Fig. 5, is a perspective view of a bracket. Fig. 6, is a side elevation of a depending clip bolt. Fig. 7, is a perspective view of one of the terminals of the fender bars.

In the drawings, 1, is a hollow cylinder, internally contracted at the rear end to form a shoulder 1^a. A rod 2 extends into and preferably through said chamber, and within said chamber is positioned an open coiled spring 3, which bears at one end against said shoulder and at its forward end bears against some portion of the rod 2, as, for example, against a shoulder 2^a formed on said rod intermediate of its ends, and adapted to operate as a piston. The forward end of said rod carries one or more thimbles, preferably two of them, as 4 and 4^a connected together by a web 4^b into which web the forward end of said rod is tapped. Set screws 5 are preferably provided penetrating the walls of said thimbles. Positioned near the forward end of said cylinder is a lug 1^b adapted to receive the end of a modified—that is, lengthened—spring hanging bolt 6 of a vehicle, as, for example, of an automobile, by which bolt said cylinder is designed to be in part supported. In rear of said lug is positioned a second lug

1^c through which extends an eye bolt 7, through the eye of which extends the shank of a transversely directed bracket 8. Said bracket has formed therein a vertically directed bolt passage, preferably in the form of a longitudinally directed slot, as 8^a. Said bracket is also preferably corrugated across its upper face, as at 8^b. Against the lower face of said bracket is positioned a pedestal block 9, which is preferably recessed in its lower face as at 9^a to receive an elastic pad 9^b preferably of rubber or felt. Said pedestal is preferably provided with upwardly turned longitudinal side flanges 9^c adapted to extend over the sides of said bracket to prevent the pedestal from slipping side-wise of the bracket. Said pedestal is also preferably corrugated in its upper face at 9^d, said corrugation being adapted to engage the corrugations on said bracket to prevent said pedestal from slipping longitudinally of said bracket. Said pad is adapted to bear upon the upper face of one of the leaves of one of the body-supporting springs 10 of the vehicle. Positioned at opposite sides of the pedestal and extending upwardly through said bracket, are two clip bolts 11, having eyes at their lower ends, through which eyes is passed a third bolt 11^a underlying said spring 10. The nuts on the upwardly directed clip bolts being tightened against the upper face of the bracket, said bracket and pedestal and pad are thereby tightly clamped upon said spring 10. It will be observed, therefore, that said cylinder is supported in part upon said bolt 6, and, by means of said bracket, pedestal and pad, is supported in part upon said spring 10.

At the opposite side of the vehicle is positioned a similar cylinder, correspondingly supported and containing a similar coiled spring and rod, which rod carries similar thimbles. Extending across the front of the vehicle from said thimbles on one side of the vehicle to the thimbles on the opposite side thereof and supported by said thimbles, are fender rods 12 and 12^a preferably of tubular construction, to prevent longitudinal slip of which tubes said set screws may be set against them. Terminal pieces, are provided for said fenders, and preferably comprise solid rods 13, reduced at their ends as at 13^a and bent rearwardly and upon themselves intermediate of their ends, as at 13^b.

Said terminal pieces preferably project transversely of the vehicle beyond the wheels thereof.

In that form of my device in which said rods 2 extend entirely through the cylinders, nuts are mounted on the rear ends of the rods to prevent the escape of the rods from the cylinders in a forward direction.

In operation, when said vehicle collides forcibly with anything in front of the fender bars, the cylinder rods, or pistons 2 press back against the coiled springs within the cylinders, which absorb the impact and cushion the blow both with respect to the vehicle which is provided with my device and with respect to the object with which said vehicle has collided. The springs within the cylinders subsequently return the pistons to normal position.

It will be obvious that within the scope of my invention and of certain of my claims, said invention may be modified in many details and in dimensions, proportions and form. It will be obvious also that within the scope of certain of my claims, air cushion cylinders and appropriate pistons may be substituted for the spring cushion cylinders of the preferred form of my device, and that other forms of clamping clips may be used, and that the device, or parts thereof, may be inverted, or mounted upon the upper bow of an elliptical vehicle spring instead of upon the lower bow thereof.

Particularly do I desire to make it clear that if desired, as may be the case where there is not convenient room above the lower bow of the spring 10 and the overhead structure to secure the clamp to said spring in the manner illustrated, said bracket 8 may be inverted and extended below the spring 10, and the pedestal 9 may be inverted and placed below said spring and on said bracket, and the said pad may then be placed on the pedestal below said spring, and the bolt 11^a may extend over said spring and the bolt 11 may extend downward through said bracket, all within the spirit and scope of my claims.

I regard the clamping device as an important feature of my invention as it avoids the necessity of boring portions of the body frame of the vehicle in order to secure support for the reciprocating members of the fender. Said pad is also important, since by its elasticity it tends to keep the nuts tight on the bolts 11 and absorbs vibration, and will yield to some extent longitudinally without moving the clamp, should a superposed leaf of the spring strike end wise against it.

What I claim is:

1. In a fender, the combination with a vehicle, of cylinders positioned at opposite sides thereof and supported thereby, pistons in said cylinders, piston rods extending there-

from, and a fender rod carried by said piston rods and extending across the end of the vehicle.

2. In a fender, the combination with a vehicle, of cylinders positioned at opposite sides thereof and supported thereby, pistons in said cylinders, piston rods extending therefrom, thimbles carried by said piston rods, and fender rods carried by said thimbles and extending across the end of the vehicle.

3. In a fender, the combination of a vehicle, of cylinders positioned at the opposite sides thereof and supported thereby, pistons in said cylinders, piston rods extending therefrom, thimbles carried by said piston rods, fender rods carried by said thimbles and extending across the end of the vehicle, and terminal pieces carried by said thimbles and extending transversely of the vehicle beyond the wheels thereof, said terminal pieces being bent rearwardly.

4. In a fender, the combination of two approximately parallel cylinders, supporting brackets extending from the opposing sides of said cylinders, pedestals adjustably engaging said brackets, clip members adapted to engage said bracket at each end of said pedestals and to engage a second support, pistons adapted to reciprocate within said cylinders, piston rods extending from said pistons, and a fender rod supported by said piston rods, said cylinders being provided with means for engaging other cylinder supporting means.

5. The combination with a vehicle of two reciprocable members positioned at opposite sides of said vehicle, means for supporting said members, a fender rod supported in common by the outer ends of said reciprocable members, and means for retaining said reciprocable means normally and yieldingly at the outer end of their path of movement.

6. The combination with a vehicle of body supporting springs of leaf construction, positioned at opposite sides of said vehicle and extending longitudinally thereof, transversely extending pins engaging the ends of said springs, two supports carried in part by said pins, brackets extending from said supports and adapted to support part of the weight thereof, means for clamping said brackets to said springs intermediate of the ends of said springs, reciprocable members mounted on said two supports and extending approximately parallel to each other, means for retaining said reciprocable members normally and yieldingly at the outer ends of their path of movement, and a fender rod supported in common by said reciprocable members at their outer ends.

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

ALLAN L. MCGREGOR.

Witnesses:

JAMES T. WATSON,
BERT W. FORBES.