Mar. 20, 1923. 1,449,346

P. G. PAGEL

SHOCK ABSORBER FOR TOWLINES

Filed Apr. 23, 1921

FIG. 1.

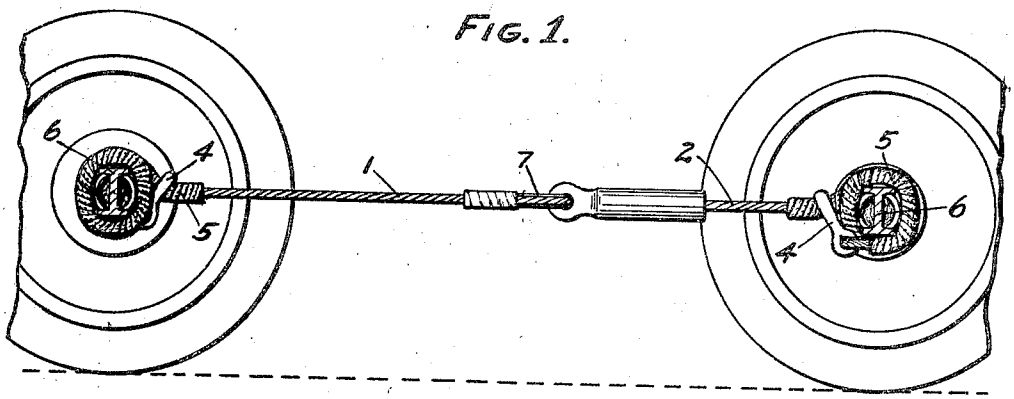


FIG. 2.

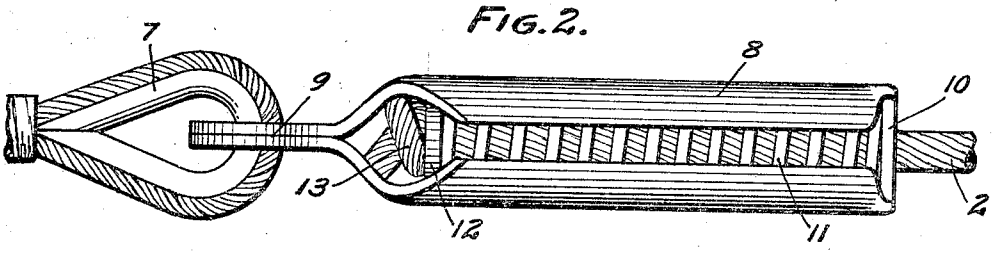


FIG. 3.

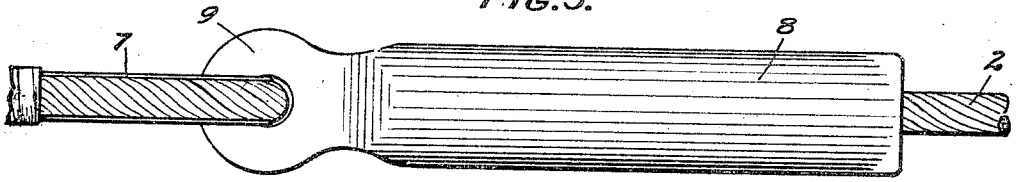
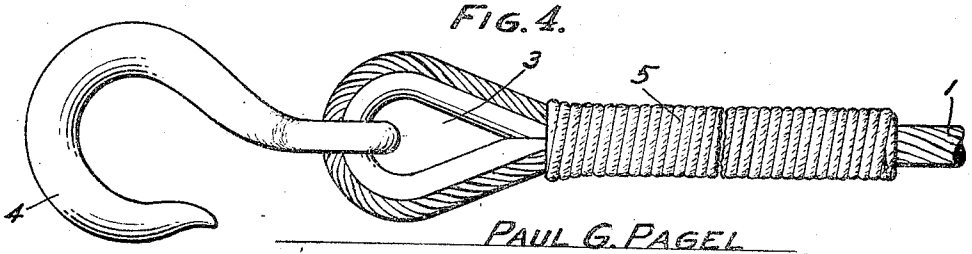


FIG. 4.



PAUL G. PAGEL INVENTOR.

BY

Hazard & Miller ATTORNEY.

Patented Mar. 20, 1923. 1,449,346

UNITED STATES PATENT OFFICE.

PAUL G. PAGEL, OF LOS ANGELES, CALIFORNIA.

SHOCK ABSORBER FOR TOWLINES.

Application filed April 23, 1921. Serial No. 463,999.

To all whom it may concern:

Be it known that I, PAUL G. PAGEL, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Shock Absorbers for Towlines, of which the following is a specification.

This invention relates to tow lines particularly adapted for use in connection with motor vehicles, and has for its object the provision of shock absorbing means in the tow line, and also a construction wherein a yieldable contact is provided between the ends of the tow line and axles, or the like, around which said ends are received.

The invention will be readily understood from the following description of the accompanying drawings, in which—

Figure 1 is a side elevation showing the tow line in use and connected to the axles of a towing car, and a machine which is being towed.

Fig. 2 is a plan view showing a resilient connection between the sections of the tow line.

Fig. 3 is a side elevation of this resilient connection.

Fig. 4 is a side elevation showing one end of the tow line.

The tow line is made in sections 1 and 2 adapted to be connected to the towing car and to the towed car respectively. These sections are preferably of metallic cable formed with usual rings 3 at the ends thereof and arranged to receive usual hooks 4. The ends of the tow line sections adjacent the rings and hooks are preferably wrapped with a yieldable winding, such as usual hemp cable 5. By this arrangement the portions of the tow line which are wrapped around axles 6 of the vehicles are cushioned so as to prevent crushing or marring by the metallic cable forming the tow line.

A resilient connection is provided between the adjacent ends of tow line sections 1 and 2 so as to form a shock absorbing tow line. For this purpose a usual ring 7 is provided at the end of one of the tow line sections, and a yieldable connecting member is provided at the end of the other tow line section.

This yieldable connecting member includes a tube preferably formed of a sheet metal blank curved transversely so as to form tube portion 8 terminating in eye lugs 9 formed by the respective sides of the blank and lying alongside of one another so as to form an eye through which ring 7 is received. At the opposite end of tube 8, the blank is folded so as to form a transverse closure plate 10 for the tube, and this closure plate is provided with an axial opening through which the end of the tow line is received. A usual coil spring 11 is received within tube 8 so as to abut against end plate 10 at one end. The end of the tow line section extends through the spring and beyond the opposite end thereof with a suitable washer 12 received against said end of the spring, and the end of the tow line section held with relation to said washer as by receiving the same through the washer and providing a knotted enlargement 13 at the end of the tow line section.

By this construction it will be seen that a yieldable connection is provided between the tube member 8 connected to tow line section 1 and the tow line section 2 extending into said tube, and as a consequence a shock absorbing tow line is thus formed.

Various changes may be made without departing from the spirit of the invention as claimed.

What is claimed is:

A resilient connection comprising a single length of metal bent to form a tube terminating at one end in eye-lugs and at the other in a closure plate provided with an opening through which a section of towline is adapted to be extended into the tube, a ring within the tube for engagement with the knotted ends of said towline, and an expansible spring within the tube and interposed between said ring and plate for normally urging the towline section inwardly of the tube.

In testimony whereof I have signed my name to this specification.

PAUL G. PAGEL.