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C. P. SCHLEGEL

GRIP STRAP

Filed Jan. 2, 1925

Fig. 2

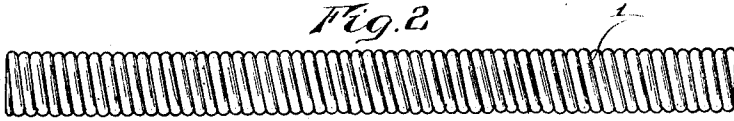


Fig. 3

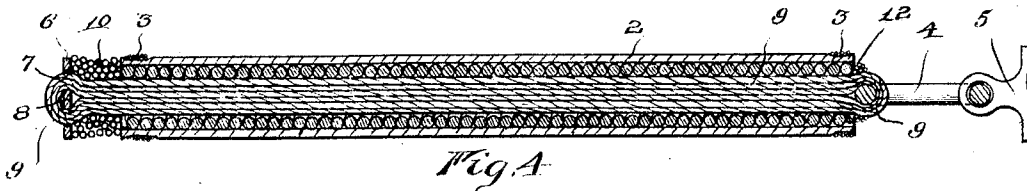
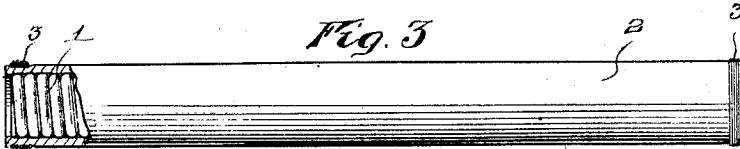


Fig. 4

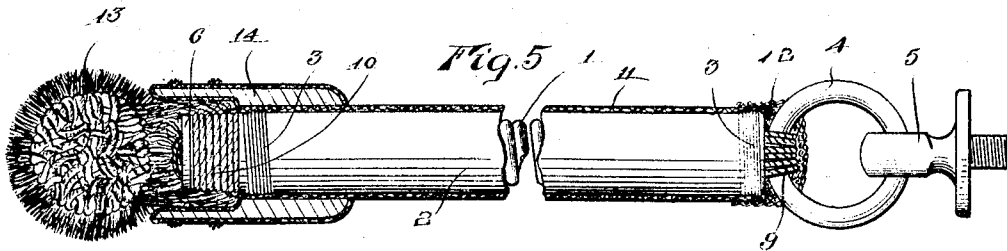


Fig. 5

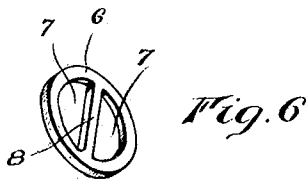


Fig. 6

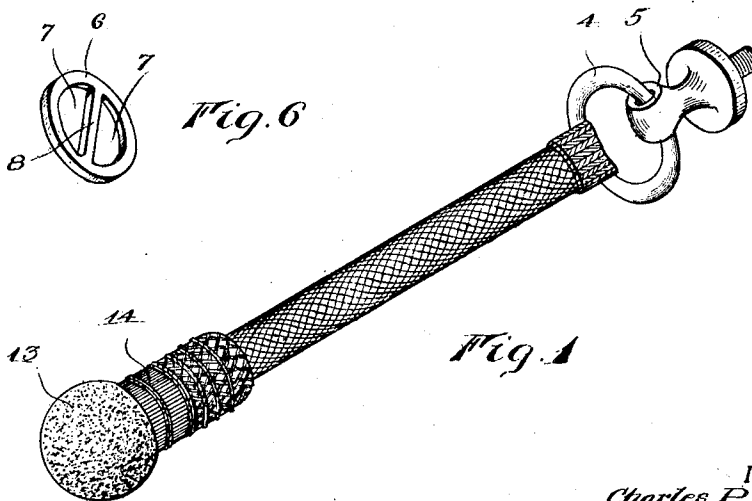


Fig. 7

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UNITED STATES PATENT OFFICE.

CHARLES P. SCHLEGEL, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE SCHLEGEL MFG. COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

GRIP STRAP.

Application filed January 2, 1925. Serial No. 262.

To all whom it may concern:

Be it known that I, CHARLES P. SCHLEGEL, a citizen of the United States, and resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Grip Straps, of which the following is a specification.

The present invention relates to grip straps and more particularly to the type designed for arrangement in vehicles in order that the occupants in the vehicle may hold onto the same for the purpose of standing or controlling their movement toward and from a seat in the vehicle. Another object of the invention is to provide a strap which is designed for use in automobiles and which will normally maintain its shape while, at the same time, having flexibility. A further object of the invention is to provide a strap which has an elongated grip portion with a spring extending there-through to maintain the grip portion in a normally elongated condition while permitting the flexibility.

To these and other ends, the invention consists of certain parts and combinations of parts, all of which will be hereinafter described: the novel features being pointed out in the appended claims.

In the drawings:

Fig. 1 is a perspective view of a strap constructed in accordance with this invention;

Fig. 2 is a side view of a spring used in the strap;

Fig. 3 is a side view partially in section showing the spring with the rubber covering thereover;

Fig. 4 is a longitudinal sectional view through the strap before the textile covering and the ornament is applied thereto;

Fig. 5 is a longitudinal sectional view of the strap showing the rubber covering in elevation; and

Fig. 6 is a perspective view of the anchoring device.

Many of the modern enclosed automobiles have at one or both sides of the seats a strap which is employed for assisting one in rising or seating. This strap due to the weight imposed thereon becomes distorted after a time and eventually loses its shape.

According to this invention a strap with

an elongated grip portion is provided which will permit the flexing of such grip portion in the hand, while, at the same time, will resume its normal shape after being released by the hand. It is apparent, however, that this strap may be used in other vehicles.

In the illustrated embodiment of the invention, there is employed a helical spring 1 extending longitudinally of the grip portion of a strap. This helical spring is first enclosed by a covering 2 preferably of tubular form and made in this instance from rubber, the tube being anchored to the coil by one or more windings 3.

At one end of this elongated grip portion an attaching device is mounted. In this instance, this attaching device embodies a ring 4 and a screw eye 5. In order to secure this attaching device to the strap an anchoring means is arranged at the opposite end of the strap and is connected to the attaching device. In this instance, the anchoring means is in the form of a plate or disk 6 formed with two openings 7, so that a cross bar 8 is arranged between them. A strand or cord 9 is laced back and forth through the helical coil 1 about the ring 4 and about the cross bar 8. This connecting cord 9 is longer than the coil 1 so that it projects from one end of a coil in order that a winding 10 of a suitable thread may be passed about such connecting cord 9 between the end of the coil and the anchoring plate 6. This winding is so positioned that a certain amount of looseness of the cord on the ring 4 is provided in order that the strap may swing freely on the ring and not produce any extreme binding action. The winding 10 is also utilized as an ornament anchoring means as will be hereinafter set forth and also an anchoring means for a textile covering 11 which surrounds the covering 2 and is anchored at its upper end by a smaller winding 12 passed about the cord 9 adjacent the ring 4.

The winding 10 forms an anchoring means for the tassel or ball 13 and a fabric covered ferrule 14 fits over the inner end of the tassel or ball 13.

It is apparent that there is provided a strap which has an elongated grip portion provided with a spring. In this instance, this grip portion has enclosed therein a helical spring which in turn is surrounded

by a tube or sleeve of rubber anchored to the spring. A fabric covers this rubber tube and is anchored or stitched at its opposite ends to windings which pass about a connecting cord extending through the helical spring and securing an attaching device at one end of the strap by means of an anchoring device at the other end of the strap, the winding adjacent the attaching device serving also as an anchoring means or an ornamenting device for a tassel or ball.

What I claim as my invention and desire to secure by Letters Patent is:

1. A grip strap for vehicles having a laterally bendable elongated grip portion comprising a tubular member and a spring enclosed by and extending longitudinally of the tubular member to maintain the grip portion in a certain condition.

2. A grip strap for vehicles having an elongated laterally bendable grip portion comprising an outer tubular member and an inner helical coil.

3. A grip strap for vehicles having a laterally bendable elongated grip portion comprising a helical spring, a core extending longitudinally through the spring and a covering for the spring having connection with the core at opposite ends of the spring.

4. A grip strap for vehicles having an elongated laterally bendable grip portion comprising a closely wound helical spring, a core extending through the spring and having the spring secured against longitudinal movement on said core, and a covering for the spring having connection with the core at opposite ends of the spring.

5. A grip strap for vehicles having an elongated laterally bendable grip portion comprising a closely wound helical spring, a thread laced back and forth through the spring, devices at opposite ends of the spring to which said thread is connected, and a covering for the spring having connection with the threads at opposite ends of the spring.

6. A grip strap for vehicles embodying a helical metallic coil, a tubular rubber covering about the same, and a flexible covering for said tubular covering.

7. A grip strap for vehicles embodying a helical metallic coil, a laterally bendable covering for the same, an attaching device at one end of the coil, anchoring means at the opposite end of the coil, and a connection between the anchoring means and the attaching device.

8. A strap for vehicles embodying a helical metallic coil, a tubular rubber covering about the same, a textile cover about said tubular rubber covering, an attaching device at one end of the coil, and an anchoring de-

vice for the attaching device at the opposite end of the coil.

9. A strap for vehicles embodying a helical metallic coil, a covering for the same, an attaching device at one end of the coil embodying a ring, a plate at the opposite end of the coil having a cross bar, and a cord laced through the ring and the plate.

10. A strap for vehicles embodying a helical metallic coil, an anchoring device secured at one end of the coil, an ornament anchoring means at the opposite end of the coil, and an ornament secured to said anchoring means said strap being laterally bendable and held in straight condition by the helical metallic coil.

11. A strap embodying a helical metallic coil, an attaching device at one end of the coil, an anchoring device at the opposite end of the coil, and a connection between the anchoring device and the attaching device extending through the coil, windings passing about the connection at opposite ends of the coil, and a fabric covering surrounding the coil and secured at opposite ends to the windings.

12. A strap embodying a helical metallic coil, an attaching device at one end of the coil, an anchoring device at the opposite end of the coil, a connection between the anchoring device and the attaching device extending through the coil, windings passing about the connection at opposite ends of the coil, a fabric covering surrounding the coil and secured at opposite ends to the windings, and an ornament secured to the windings adjacent the anchoring device.

13. A strap for vehicles embodying a helical coil, a tubular rubber covering about the same, an attaching device arranged at one end of the coil, an anchoring device arranged at the other end of the coil, connection between said anchoring device and said attaching device extending through the coil, windings about said connection at opposite ends of the coil, and a textile covering about the tubular rubber covering anchored at opposite ends of the winding, and an ornament secured to the windings adjacent the anchoring device.

14. A grip strap having a laterally bendable grip portion comprising a helical coil, a central laterally bendable but longitudinally unyieldable core in said coil, and a flexible covering for said coil.

15. A grip strap comprising a core, longitudinally unyieldable, and laterally bendable, a helical coil surrounding said core and acting to maintain the strap in a certain condition, and a fabric covering for the coil.

CHARLES P. SCHLEGEL.