## PATENT SPECIFICATION



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151,954

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## COMPLETE SPECIFICATION.

## Improvements in or relating to Suspension Springs for Vehicles.

We, Lancia & C., 99, Via Monginevro, Turin, Italy, an Italian company, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to laminated semi-elliptical springs used in vehicle 10 body suspensions, particularly motor cars, and in which the end eyes for their connection are constituted by separate pieces which are connected with the main leaf of the spring.

According to the invention each eye, which comprises an extension adapted to be mounted on the face of the main leaf of the spring, is secured to the latter by means of two bolts, one of which passes through a hole provided at the end of the main leaf, while the other passes through a hole provided at a point more within the main leaf and enters a notch in the adjacent leaf of the spring which notch is of the necessary width to prevent the bolt head or nut rotating.

In the accompanying drawing an embodiment of this invention is shown 30 by way of example.

Figure 1 is a side view of a semielliptical spring with connecting eyes secured to it;

Figure 2 is a bottom view on an 35 enlarged scale of the two ends of the spring and

Figures 3 and 4 are the vertical sections of each end respectively.

The sleeve 1 with the hole accurately

drilled, is provided with an extension 2, 40 having a shape which depends upon whether the eye is intended to be located above or under the leaf. The extension 2 is adapted to be mounted on the end of the main leaf 3 to which it is secured in 45 a proper manner.

The sleeve is connected with the leaf 3 of the spring by applying its extension 2 on the top of the leaf and by fastening it by a pair of bolts 4 passing 50 through holes in the leaf 3 and passing through or engaging holes provided in said extension 2.

Owing to the fact that the connection of extension 2 with the leaf 3 extends 55 over a portion of the end of the adjacent leaf, the adjacent leaf 5 is recessed at 6 (Figure 2) to provide a space for the inner bolt 4, and the width of said recess is preferably slightly larger than the 60 span of the head of bolt 4, for engaging said head and preventing the bolt from being rotated when the nut is screwed thereon.

The described method improves the 65 construction of the springs so that the latter may be provided with connecting eyes having the required accuracy and strength.

Having now particularly described and 70 ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

A semi-elliptical spring for the suspen- 75 sion of vehicles, in which the end eyes consist of separate pieces secured to the

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main leaf of the spring, characterised by the extension of each eye being connected to the main leaf of the spring by means of two bolts, one of which passes through a hole arranged at the end of the main leaf and the other through a hole arranged at a point more within the said leaf and enters a notch in the adjacent leaf of the spring which notch

is of sufficient width to prevent the bolt 10 rotating.

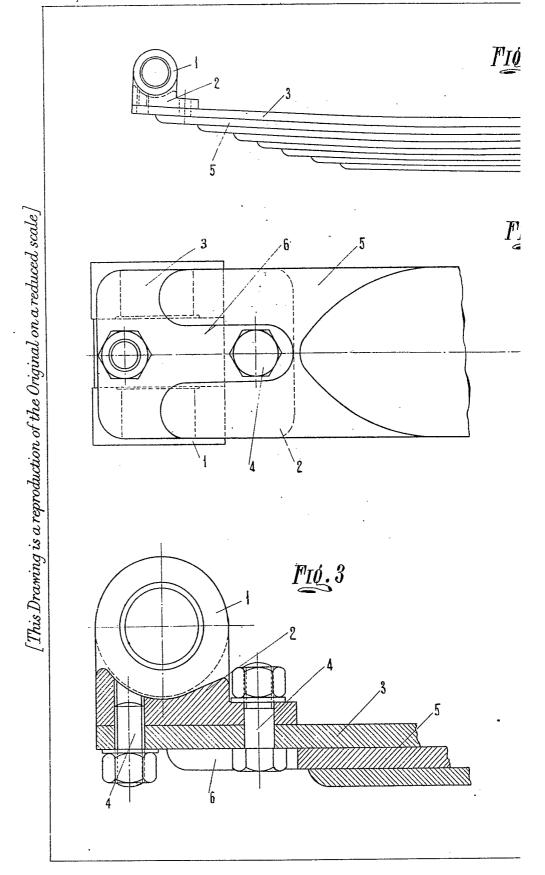
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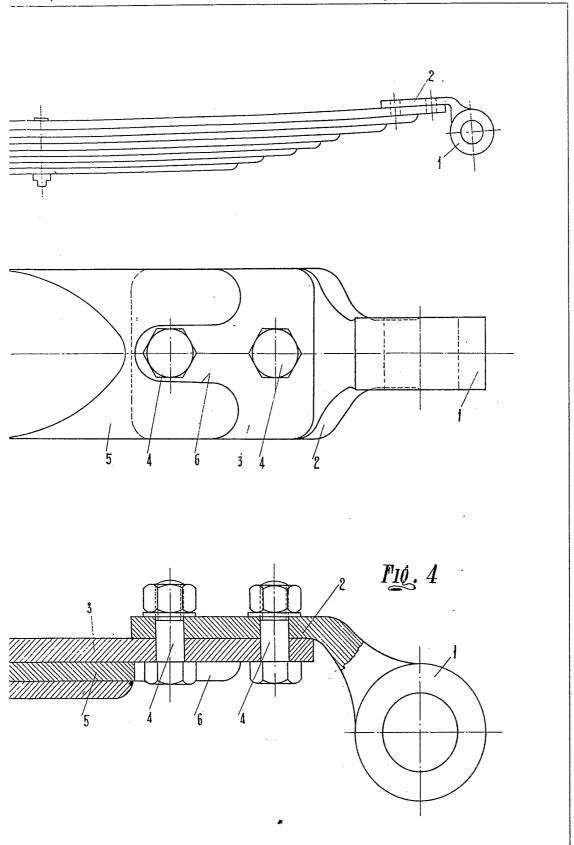
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