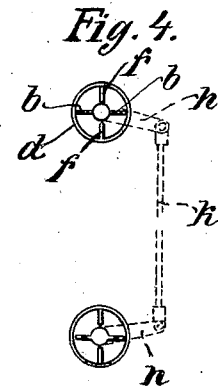
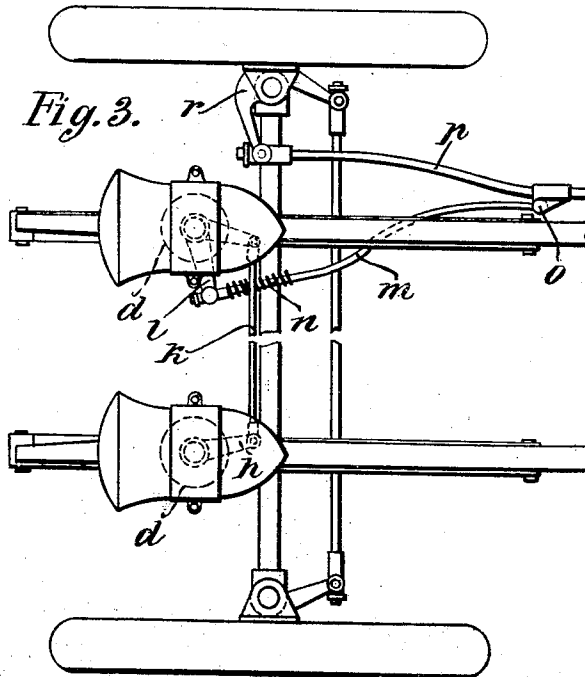
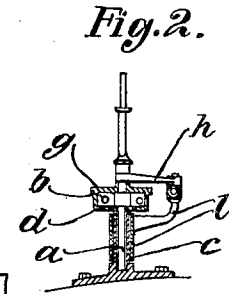
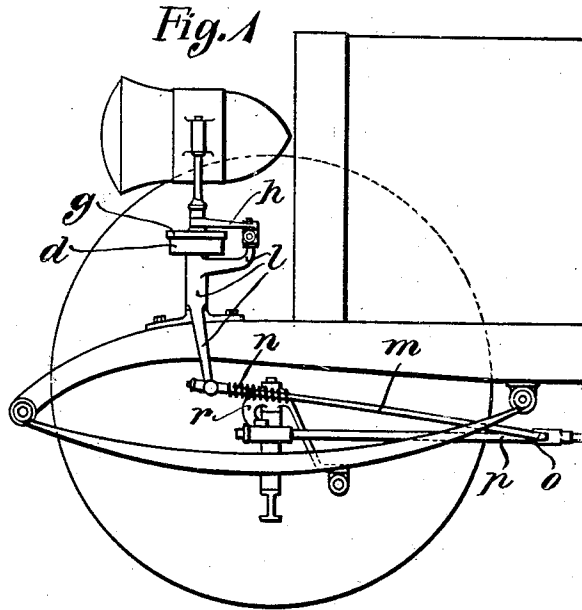


F. MÜLLER.
 DIRIGIBLE HEADLIGHT.
 APPLICATION FILED JUNE 8, 1911.

1,042,137.

Patented Oct. 22, 1912.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRITZ MÜLLER, OF COLOGNE, GERMANY.

DIRIGIBLE HEADLIGHT.

1,042,137.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed June 8, 1911. Serial No. 631,988.

To all whom it may concern:

Be it known that I, FRITZ MÜLLER, private secretary, a subject of the German Empire, residing at Cologne-on-the-Rhine, Germany, have invented new and useful Improvements in Dirigible Headlights, of which the following is a specification.

This invention relates to means for turning the lamps of motor vehicles in the direction of travel simultaneously with the steering wheels.

In the device constructed according to this invention the lamps are connected to a liquid brake in such a manner that movement of the lamps cannot be effected without a simultaneous braking action by the liquid. Moreover, in the device which transmits the turning movement to the lamp, is inserted the well known intermediate spring member to take up the disturbing vibrations. The liquid brake is of such construction, that its resistance, in case of short and quick movements of the parts affecting the setting of the lamp, such as are produced on a rough road, is greater than the resistance of the springs. The lamps cannot therefore follow the vibrations of the steering wheels. In order to enable the lamps to be rotated by means of the steering device it is, on the contrary, necessary, in case of a slower movement of the setting parts produced by the rotation of the steering wheel, that the resistance of the braking liquid should be less than the resistance of the springs. Such an interaction between the springs and the liquid brake is possible, as in case of an accelerated movement of the parts operating them, the resistance of the liquid brake increases in an extremely rapid manner, while the resistance of the springs does not increase.

A device constructed according to this invention is illustrated in the accompanying drawing in which—

Figure 1 is a vertical longitudinal section through the car showing the device in side elevation. Fig. 2 is a vertical section through the lamp holder. Fig. 3 is a plan of the device, and Fig. 4 a horizontal cross-section through the liquid brakes.

The vertical lamp holder which, as usual, is bifurcated at the top, has a cylindrical spindle *a* provided with two wings or blades *b* (Figs. 2 and 4) which are adapted to rotate in a closed casing. The casing which is rigidly secured to the chassis of the car is

flanged at its bottom portion while its central portion *c* is tubular and its upper portion is in the form of a cup *d* adapted to receive the blades *b*. The cup, which is provided with two partitions *f* (Fig. 4) extending to the spindle *a* of the lamp holder, is closed by a cover *g*. When the lamp is in its central position, the rotatable blades *b*, which extend outward in opposite directions, are at right angle to the fixed partitions *f* which are also in line with each other. The cup *d* thus divided into four chambers, is filled with braking liquid, and the two blades *b* are each provided with a small perforation through which the braking liquid can pass during the movements of the lamp holder. The upper portion of one lamp holder is further provided with an arm *h* connected by means of a rod *k* to a similar arm of the second lamp holder. The direction of the said arm *h* is calculated in such a manner that in the central position of the lamps each arm is symmetrical with and approximately parallel to the lever operating the corresponding wheel as clearly shown in Fig. 3. In order to move the lamps, thus connected, simultaneously with the steering wheels, the lamp holder on the right hand side is provided with a lever *l* having a vertical sleeve-shaped portion surrounding the tubular portion *c* of the fixed casing. The lever *l* is provided with an upper arm operatively connected to the arm *h* of the lamp holder, and with a lower arm which is adapted to be moved by the auxiliary steering rod *m*. This auxiliary steering rod *m* is provided with an expansible or contractible spring *n* forming an elastic intermediate member and is connected by a joint *o* to the main steering rod *p* which actuates the steering arms *r* of the wheels.

Instead of two only one liquid brake could be provided of any desired construction and arrangement.

Having now particularly described the invention, what I claim as new and desire to secure by Letters Patent is:

1. In a motor vehicle, in combination, a steering gear, a lamp, means controlled by the steering movement of said steering gear to rotate said lamp to direct it in the direction of travel of the vehicle, and a brake for maintaining said lamp against movement when said steering gear is subjected to a vibratory movement.

2. In a motor vehicle, in combination, a

steering gear, a lamp, means controlled by the steering movement of said steering gear to rotate said lamp to direct it in the direction of travel of the vehicle, and a liquid
5 brake for maintaining said lamp against movement when said steering gear is subjected to a vibratory movement.

3. In a motor vehicle, in combination, a steering gear, a lamp, resilient means controlled by the steering movement of said
10 steering gear to rotate said lamp to direct it in the direction of travel of the vehicle, and a liquid brake for maintaining said lamp against movement when said steering gear is
15 subjected to a vibratory movement.

4. In a motor vehicle, in combination, a steering gear, a lamp, a rotatable supporting spindle therefor, a blade attached to
20 said spindle, a fixed closed casing surrounding said spindle and within which said blade is positioned, a liquid within said casing,

said casing being provided with a partition, and means operatively connected to said steering gear for rotating said spindle and
said lamp.

5. In a motor vehicle, in combination, a
25 steering gear, a lamp, a rotatable supporting spindle therefor, a perforated blade attached to said spindle, a fixed closed casing surrounding said spindle and within which
30 said blade is positioned, a liquid within said casing, said casing being provided with a partition, and means operatively connected to said steering gear for rotating said
spindle and said lamp.

35 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRITZ MÜLLER.

Witnesses:

GERTRUD BONA,
M. KNEPPERS.

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