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F. T. MOODY

POSITIONING APPARATUS FOR HEADLIGHTS

Filed Feb. 20, 1922

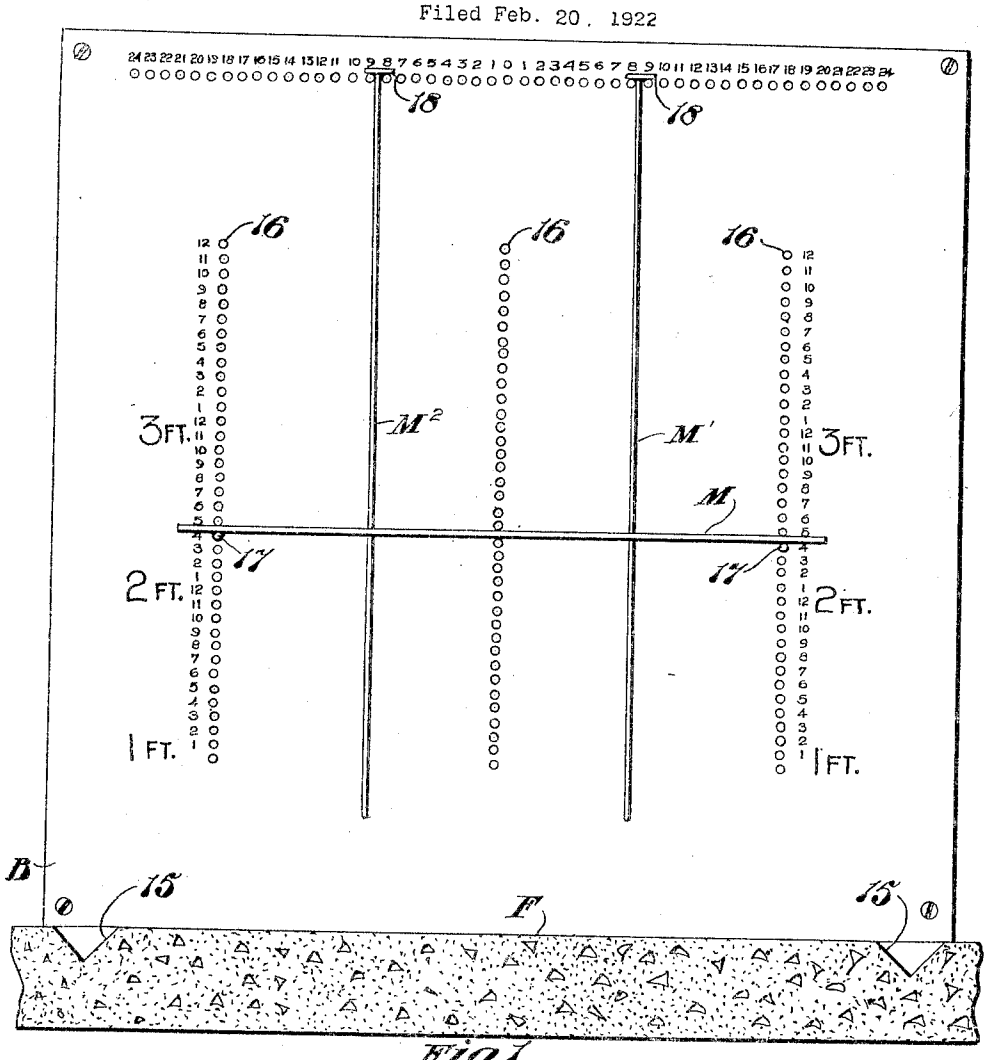

Fig. 1.

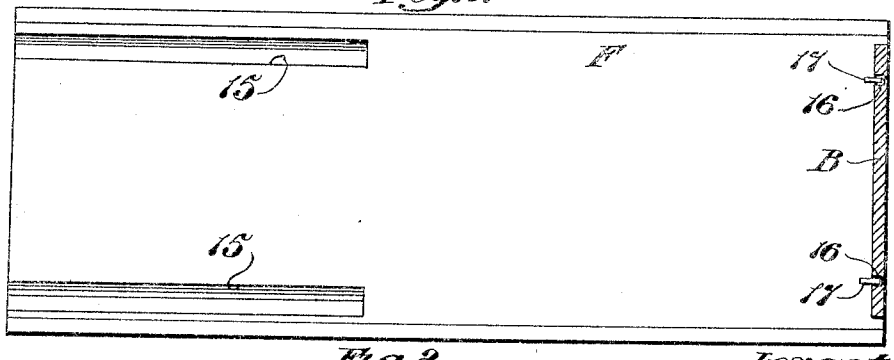

Fig. 2.

Inventor:
F. T. Moody.
by Hazard & Miller
Attys

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UNITED STATES PATENT OFFICE.

FRED T. MOODY, OF LONG BEACH, CALIFORNIA.

POSITIONING APPARATUS FOR HEADLIGHTS.

Application filed February 20, 1922. Serial No. 537,751.

To all whom it may concern:

Be it known that I, FRED T. MOODY, a citizen of the United States, residing at Long Beach, in the county of Los Angeles and State of California, have invented new and useful Improvements in Positioning Apparatus for Headlights, of which the following is a specification.

My invention relates to and has for its purpose the provision of an apparatus designed for determining the position of the focal point of motor vehicle head lights, whereby the lights can be adjusted to secure the proper light projection as required by law.

Although I will describe only one form of positioning apparatus for head lights embodying my invention and point out the novel features thereof in claims, it is to be understood that various changes and modifications may be made herein without departing from the spirit and scope of such claims.

In the accompanying drawings,

Figure 1 is a view showing in front elevation one form of positioning apparatus for head lights embodying my invention.

Fig. 2 is a top plan view of the apparatus shown in Fig. 1 with the chart board in section.

Referring specifically to the drawings in which similar reference characters refer to similar parts, my invention, in its present embodiment, comprises a floor or runway F which may constitute an integral part of a garage floor and which as shown is provided with grooves 15 spaced apart in parallelism to accommodate the wheel of a motor vehicle and which are V-shape in cross section for the purpose of effecting a positioning of the wheels within the grooves for a purpose which will be described hereinafter.

At one end of the floor or runway is arranged a board B, such board being shown as formed separately from the wall of the garage which, as will be understood, may constitute an integral part of such wall. As shown in Fig. 1, this board is provided with a chart consisting of three vertical rows of pockets or openings 16 arranged in spaced parallelism, with the pockets of each row arranged one inch apart as indicated by the figures designating inches. The lowermost pocket of each row is preferably formed in the board at a distance about one foot from the base of the board or the floor F, and sufficient pockets are provided to cover a range of three feet, although it is to be understood that the pockets may be arranged at any desired intervals and the rows of any desired length. It is to be particularly noted that the openings of the center row are not designated by numerals as this is unnecessary to the successful operation of the chart. Above the vertical rows is a horizontal row of pockets or openings also arranged at intervals of one inch with the inches designated by figures ranging from one to twenty-four and in two series starting from a point medially of the row or that point coinciding with the central vertical row of pockets as is clearly shown in Fig. 1.

All of the pockets of all three rows are adapted to receive pegs 17 which project from the forward side of the board a distance sufficient to provide supporting means for marking members M, M′ and M². The marking member M may consist of an elastic or rigid member, the rigid member having been shown in the present instance in the form of a rod. The members M′ and M² consist of rods having T heads 18 which are adapted to engage any adjacent pair of pegs for supporting the rods in vertical position and in intersecting relation with respect to the member M.

In practice, the forward ends of the grooves 15 are preferably disposed at a distance of twenty-five feet from the board B, so that when a motor vehicle advances upon the floor F, the wheels of the vehicle being within the grooves 15 will limit the forward movement of the wheels when reaching the ends of the grooves. The chart upon the board B is so arranged with respect to the grooves 15 that the contour of the grooves in effecting a centering of the wheels therein properly positions the vehicle with relation to the chart.

To properly position the focal point of the head lights, it is first necessary to determine the distance between the centers of the head lights and the distance of the head lights from the floor. These two dimensions having been obtained, the marking member M is adjusted vertically upon the chart to a point corresponding to the distance of the lamps from the floor F, and the marking members M′ and M² are positioned upon the horizontal row of pegs at such points that the distance between the two

corresponds to the distance of the center of the lamps from each other and in such manner that each marking member is the same distance from the medial point of the horizontal row. With the marking members so positioned, the points of intersection of the marking members M^1 and M^2 with the marking member M determine the proper focal points of the head lights, so that by adjusting the head lights until their focal points coincide with these points of intersection, the proper positioning of the lamps and the proper light projection thereof is secured.

What I claim is:

1. An apparatus of the character described comprising a platform having grooves formed therein adapted to receive and provide a runway for the wheels of a motor vehicle, an upstanding board at one end of the platform having supporting members thereon arranged in vertical and horizontal rows, with the members of each row spaced apart equal and predetermined distances, and marker members supported by and adjustable on the supporting members, said marker members being adapted to intersect each other for the purpose described.

2. A position chart of the character described comprising a board having supporting members thereon arranged in vertical and horizontal rows, with the members of each row spaced apart equal and predetermined distances, and marker members supported by and adjustable on the supporting members, said marker members being adapted to intersect each other for the purpose described.

3. An apparatus of the character described comprising a platform having positioning grooves formed therein adapted to receive and provide a runway for the wheels of a motor vehicle, an upstanding board at one end of the platform having supporting members thereon arranged in vertical and horizontal rows, with the members of each row spaced apart equal and predetermined distances, and marker members supported by and adjustable on the supporting members, said marker members being adapted to intersect each other for the purpose described.

4. An apparatus of the character described comprising a platform having grooves of V-shape form in cross section therein adapted to receive and provide a runway for the wheels of a motor vehicle, an upstanding board at one end of the platform having supporting members thereon arranged in vertical and horizontal rows, with the members of each row spaced apart equal and predetermined distances, and marker members supported by and adjustable on the supporting members, said marker members being adapted to intersect each other for the purpose described.

5. In combination, a platform, a positioning chart perpendicular with respect to the platform, said platform being formed with grooves and constituting tracks to receive the wheels of a vehicle and definitely position the vehicle with respect to the chart.

6. A chart for determining the positioning of the focal points of motor vehicle headlights comprising a board, means adjustable on the board adapted to designate the distance of the headlights from the ground, and means adjustable on the board adapted to designate the distance of the center of the headlights from each other whereby the second means is caused to cooperate with the first means to determine the proper focal points of the headlights.

7. A position chart of the character described comprising a board having supporting members thereon arranged in vertical and horizontal rows, with the members of each row spaced apart equal and predetermined distances, and rods supported by and adjustable on the supporting members adapted to intersect each other for the purpose described.

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

FRED T. MOODY.