No. 820,883. PATENTED MAY 15, 1906.

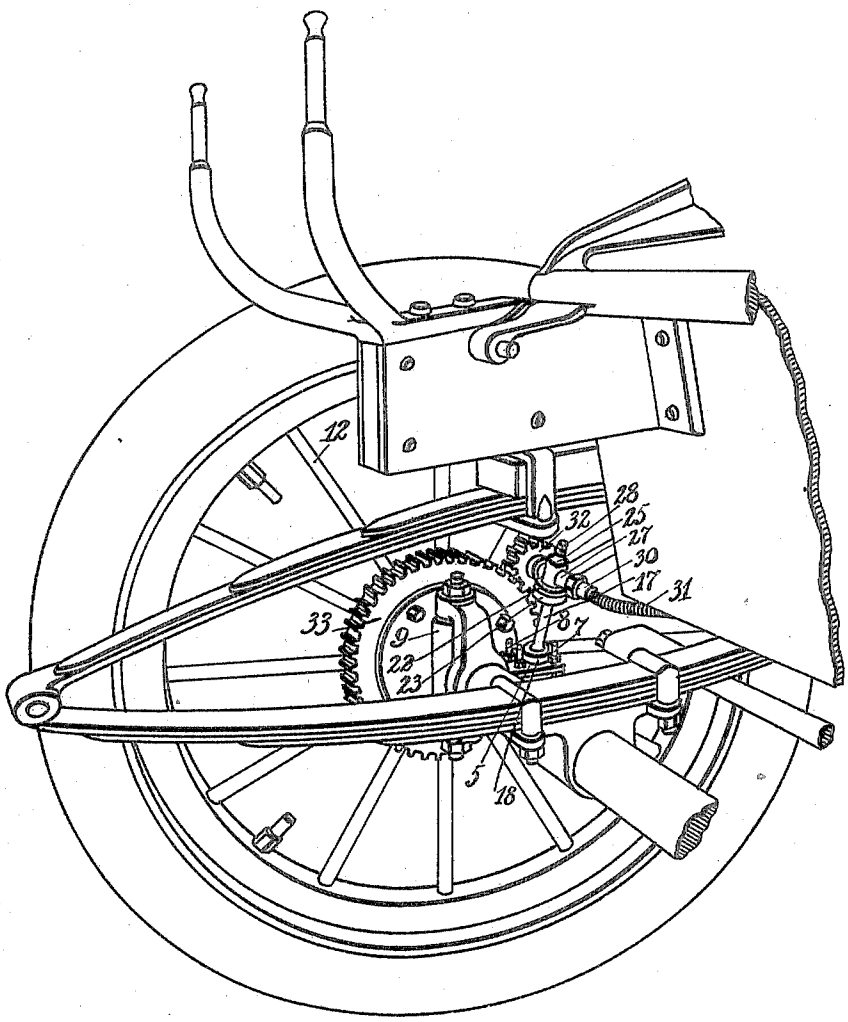
E. S. LEA.

SWIVEL BEARING.

APPLICATION FILED MAY 13, 1905.

2 SHEETS—SHEET 1.

Fig. 1.



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SWIVEL BEARING.

APPLICATION FILED MAY 13, 1905.

2 SHEETS—SHEET 2.

Fig. 3.

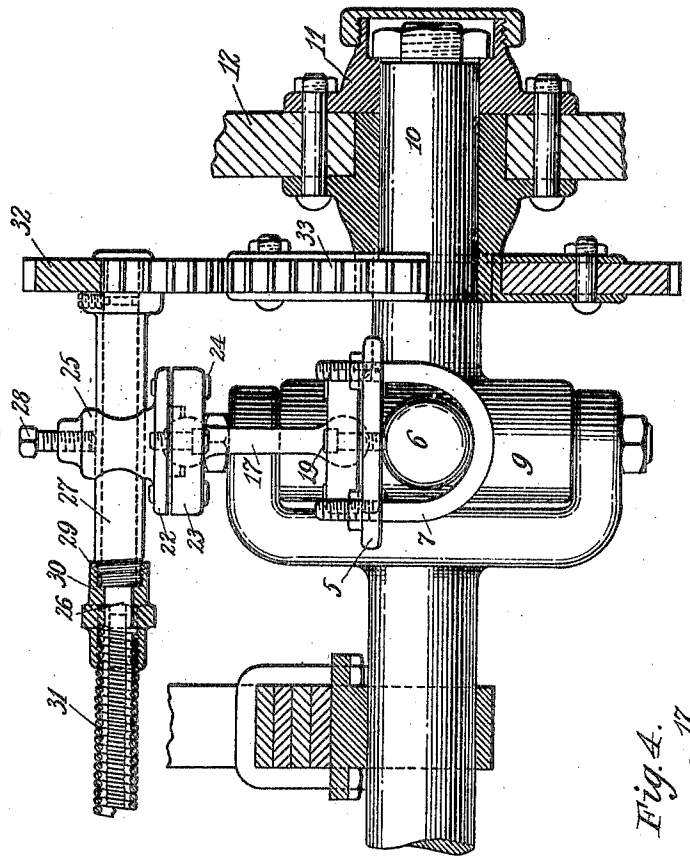


Fig. 4.

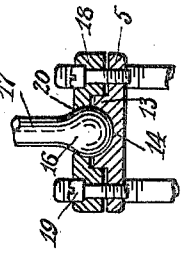
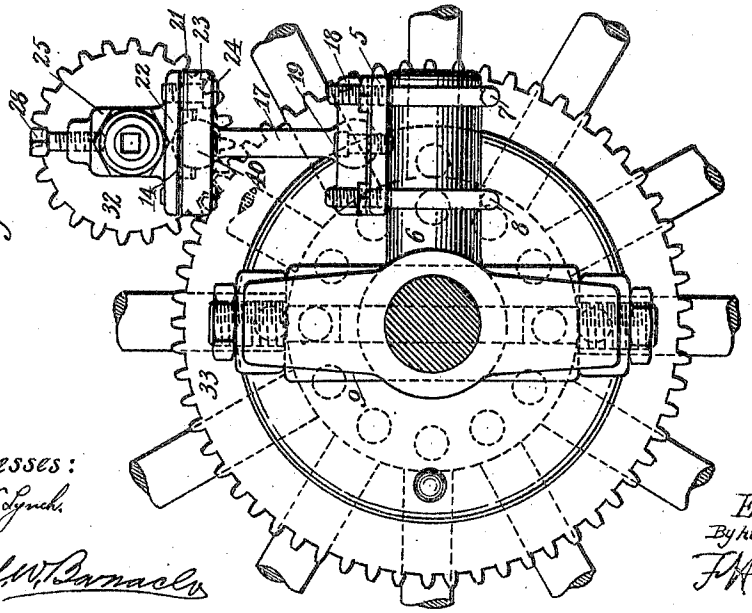


Fig. 2.



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UNITED STATES PATENT OFFICE.

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SWIVEL-BEARING.

No. 820,883. Specification of Letters Patent. Patented May 15, 1906.

Application filed May 13, 1905. Serial No. 260,359.

To all whom it may concern:

Be it known that I, EDWARD S. LEA, a citizen of the United States, residing in Trenton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Swivel-Bearings, of which the following is a specification.

The invention has reference to means for supporting a bearing from a variety of locations.

The use of the invention for various purposes in the various arts is contemplated, notwithstanding that an embodiment of said invention is herein disclosed as applied to a vehicle for the purpose of carrying and supporting a pinion relatively to a gear mounted on one of the wheels, the pinion being associated with a flexible connection which transmits the motion from the wheel-gear to a speed-determining device.

Difficulty is very often experienced in being able to locate the bearing which carries a pinion connected to the flexible shaft in proper relation to the gear which is fixed to the wheel unless a specially-constructed mounting or clip for the bearing is made, and inasmuch as various vehicles are of widely-varying construction the manner of locating the pinion must also be varied. With a structure similar to that disclosed in this case the pinion may be located in any suitable manner relatively to the gear irrespective of the construction of the vehicle.

An embodiment of the invention is illustrated by the accompanying sheets of drawings, whereon—

Figure 1 illustrates a fragment of an automobile in perspective and shows an application of the invention thereto. Fig. 2 illustrates a side elevation of the same. Fig. 3 illustrates a front elevation thereof, and Fig. 4 illustrates an elevational view in section of one of the joints.

A base 5 may be secured to an arm 6 by clips 7 and 8, and while this arm in the present instance extends from a member 9, which carries a spindle 10, upon which the hub 11 of the wheel 12 may rotate, it is intended and is one of the salient designs of this invention that this base 5 may be located at any suitable and convenient point. This base 5 in the present instance may be provided with a seat 13, which may have a spherical depression 14 to accommodate an extremity 16 of an arm 17, and this spherical-formed extremity may be held in place in the depression 14 by a cap 18, which may be secured to the base by set-screws 19. It may be here remarked that the depression 14 will be less than hemispherical and the opening 20 in the cap 18 may be of such a size as to prevent the said cap 18 and the base 5 from meeting, so that when both are forced toward each other by the set-screws 19 the base and the cap will so engage the spherical extremity 16 as to frictionally hold the same, and thereby the arm, to any position to which it may be adjusted. The opposite extremity of the arm 17 may likewise be spherically formed, as at 40, and may be seated in a depression 14, which may be formed in a seat 21, carried by a carrying-plate 22, and a clamping-plate 23, securable to the plate 22 by set-screws 24, may hold the portion 40 to its seat and engage the same in a manner similar to that heretofore described. This plate 22 may be provided with a post 25, which may carry a shaft 26, which in the present instance may be journaled in a bearing 27, which may be shiftable relatively to the standard 25 and held in any position by a set-screw 28.

The bearing 27 in the present instance may be provided with a screwed-thereto portion 29 to accommodate a coupling 30, which may be carried by a flexible connection 31, such as a flexible shaft, and this flexible shaft may be united with the shaft 26 in any suitable manner. The shaft 26 may be provided with a pinion 32, which is adapted to mesh with a gear 33, mounted upon the hub 11 of the wheel 12. It will also be noted that the arrangement is such that the size of the gear on the wheel may be varied and that the pinion may be located relatively to a fixed point in any position to accommodate the size of the gear.

Having thus described this invention, I claim—

1. An adjustable bracket comprising a base, a supporting-arm, clamping means for rigidly securing the arm by one end to the base for universal adjustment, a carrying member, clamping means for rigidly securing the arm by its other end to the clamping member for universal adjustment, and a bearing adjustably mounted on the carrying member.

2. An adjustable bracket comprising a base, an arm having a head at each end, a clamping-plate, means for locking the clamping-plate to the base, the base and plate being arranged to engage the arm by one head

for universal adjustment and to clamp it in such positions, a carrying-plate, a second clamping-plate, means for securing the carrying-plate to the latter clamping-plate, the latter member being arranged to support the arm by its other head for universal adjustment and to secure the arm in such adjusted positions, and a post secured to the carrying-plate, and a bearing adjustably secured to the post.

3. An adjustable bracket comprising a base, securing means carried by the base, the base having a concave recess, a clamping-plate having a tapering aperture, screws for securing the clamping-plate to the base, an arm having a spherical head at each end, one of said heads being adjustably secured between the base at its recess and the apertured part of the clamping-plate whereby the arm can be secured to the base for universal adjustment and locked in such positions, a carrying-plate having a concave recess, a second clamping-plate having a tapering aperture, screws for securing the latter clamping-plate to the carrying-plate, the arm having its other head engaging the carrying-plate at its recess and also engaging the apertured part of the second clamping-plate whereby the arm is secured to the carrying-plate for universal adjustment and clamped in such positions, a post secured to the carrying-plate and having a transverse opening, a bearing longitudinally movable in the post-opening, and a bolt for clamping the bearing in the post-opening.

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