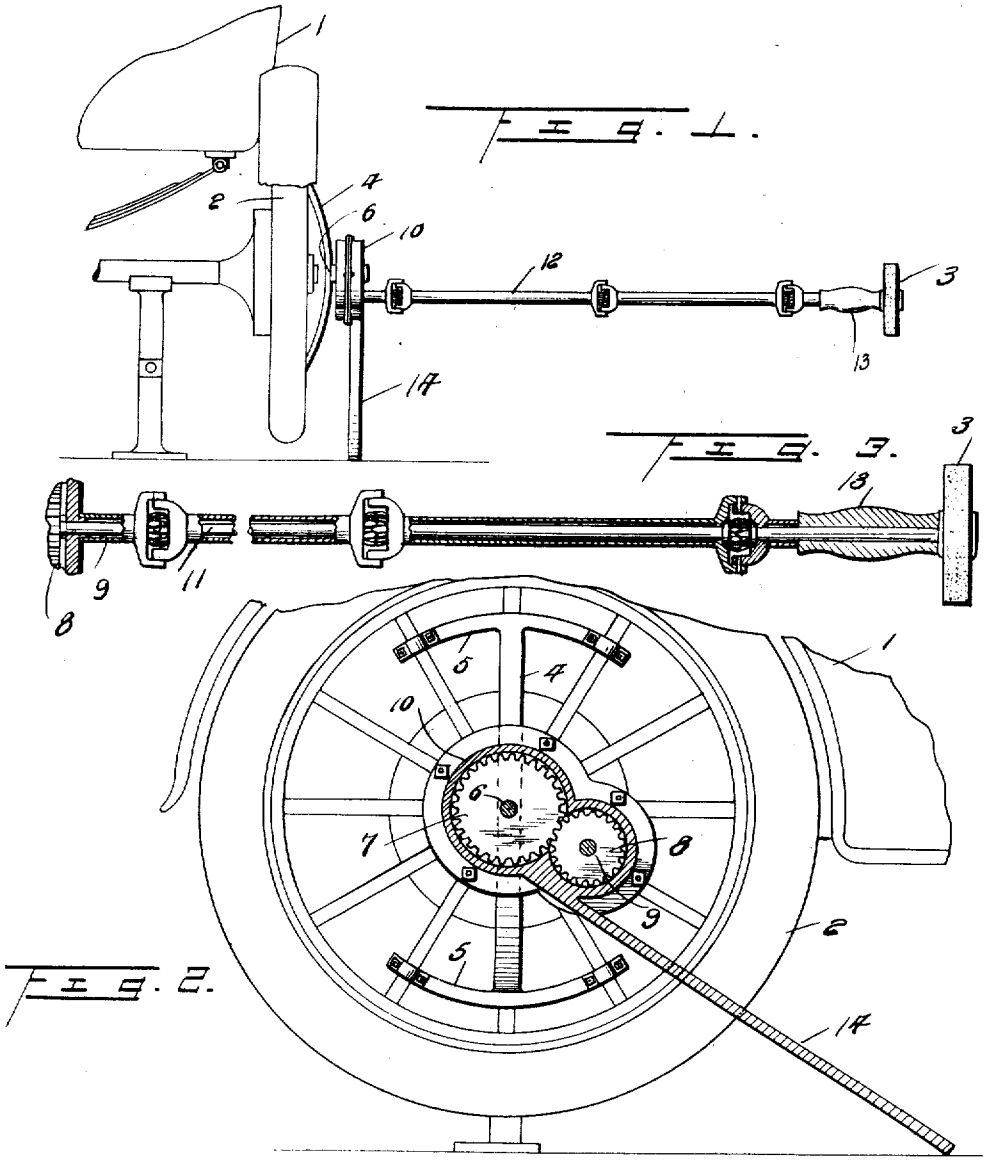
Aug. 21, 1923. **1,465,815**

E. M. GOLDNER

TOOL DRIVING ATTACHMENT FOR AUTOMOBILES

Filed June 14, 1921



Inventor
E. M. Goldner

By [signature] Attorney

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UNITED STATES PATENT OFFICE.

ELMER M. GOLDNER, OF ELLSTON, IOWA.

TOOL-DRIVING ATTACHMENT FOR AUTOMOBILES.

Application filed June 14, 1921. Serial No. 477,467.

To all whom it may concern:

Be it known that I, ELMER M. GOLDNER, a citizen of the United States, residing at Ellston, in the county of Ringgold and State of Iowa, have invented certain new and useful Improvements in Tool-Driving Attachments for Automobiles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in power driven emery or polishing wheels and has for its primary object the provision of means whereby one of the drive or rear wheels of an automobile may be employed as a driving medium for the emery or polishing wheel.

Another object of this invention is the provision of a flexible shaft having at one end the emery or polishing wheel and means at its other end adapted to be attached to the automobile wheel and receive rotation therefrom for the purpose of rotating the emery or polishing wheel through the flexible shaft, and which shaft permits the emery or polishing wheel to be used or operated at various angles.

A further object of this invention is the provision of a power driven emery or polishing wheel of the above stated character which will be simple, durable and efficient, and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination, and arrangement of parts as will be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description, and accompanying drawings, in which:—

Figure 1 is a side elevation, illustrating a power driven emery or polishing wheel constructed in accordance with my invention,

Figure 2 is a vertical sectional view illustrating the same,

Figure 3 is a sectional view illustrating the flexible shaft and the emery or polishing wheel applied thereto.

Referring in detail to the drawings, the numeral 1 indicates a fragmentary portion of an automobile and 2 indicates one of the rear or drive wheels supported in an elevated position in any suitable manner. The wheel 2 has my invention attached thereto for the purpose of rotating or driving the emery or polishing wheel 3.

A spider 4 is provided with integral arcuate shaped arms 5 at its ends and said arms are detachably secured to several of the spokes of the wheel and the spider has secured thereto a shaft or axle 6 arranged in direct alinement with the axle of the automobile, or in alinement with the hub of the rear wheel. A gear 7 is secured to the shaft or axle 6 and meshes with a gear 8 secured to a shaft 9 and the latter is journaled in a sectional casing 10. The sectional casing 10 is mounted upon the shafts 6 and 9 and encloses the gears 7 and 8. One end of the shaft 9 projects outwardly of the casing and has detachably connected thereto a flexible shaft 11 operating within a flexible housing 12. The free end of the flexible shaft has detachably secured thereto the emery or polishing wheel 3 and said shaft also has associated with its outer end a handle or finger grip 13 whereby a person may readily manipulate or support the emery or polishing wheel in contact with the object to be ground or polished.

An arm 14 is formed upon the casing 10 and is adapted to engage the ground for the purpose of preventing the casing from rotating with the rear wheel of the automobile and also with the gears 7 and 8.

In operation, with the device applied to the rear wheel of the automobile in the manner above described, the rotation of said rear wheel will cause a rotation of the gear 7 and the latter rotates the gear 8 which in turn rotates its respective shaft 9. The flexible shaft 11 being secured to the shaft 9 receives rotation therefrom and in turn imparts rotation to the emery or polishing wheel 3. The arm 14 in contact with the ground prevents rotation of the casing 10 and holds the same in proper position to properly protect or house the gears 7 and 8.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination, and arrangement

of parts may be made without departing from the spirit and scope of the invention as claimed.

Having thus described my invention what I claim is:—

A power take off for a spoked wheel comprising a spider provided with means for attachment to a plurality of spokes of the wheel at each side of the hub thereof, a stub shaft carried by said spider to be rotated therewith and to be disposed in alinement with the axis of rotation of the wheel, a gear secured to said stub shaft to be rotated therewith, an elongated gear casing enclosing said gear and supported by said stub shaft, a second stub shaft disposed at one side of the first stub shaft and journaled by said casing, a gear secured to and rotatable with said second stub shaft and disposed within the casing, said gear meshing with the first mentioned gear, said second stub shaft extending through the front wall of the gear casing and adapted to have a power shaft secured to it and an arm carried by said gear casing and adapted to engage the ground to prevent the casing rotating with the spider.

In testimony whereof I affix my signature in presence of two witnesses.

ELMER M. GOLDNER.

Witnesses:
T. J. BALLEW,
GUY M. JACKSON.