Dec. 7, 1926. 1,609,314

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BRAKE FOR AUTOMOBILES

Filed Nov. 14, 1924

Fig. 1.

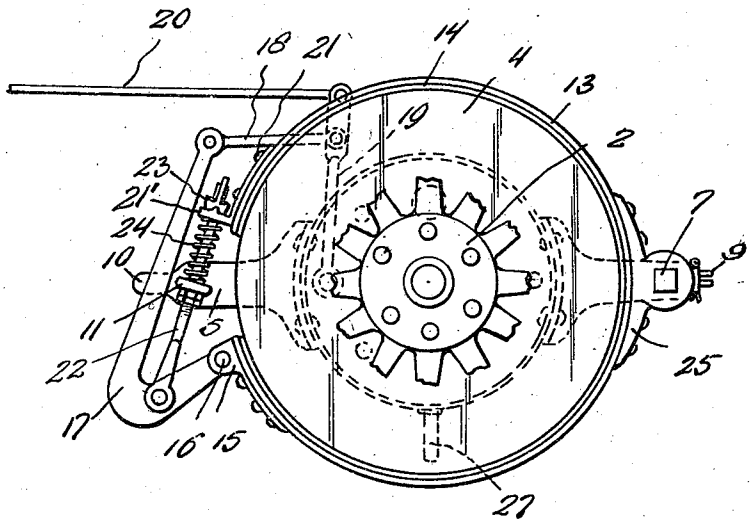


Fig. 2.

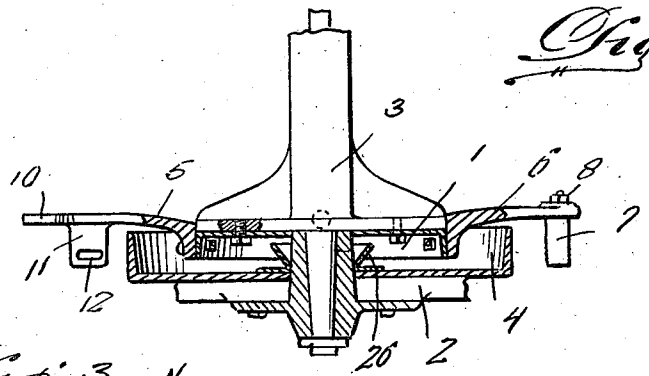
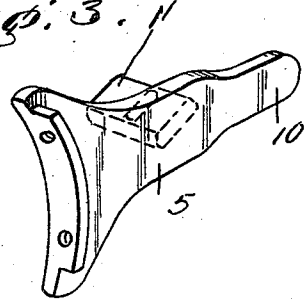


Fig. 3.



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UNITED STATES PATENT OFFICE.

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BRAKE FOR AUTOMOBILES.

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This invention relates to improvements in emergency brakes, and is adapted more particularly to automobiles of the Ford type.

One of the important objects of the present invention is to provide an emergency brake, which contemplates the use of the usual hub or brake drum of a Ford automobile, in connection with an external brake mechanism.

A further object of the invention is to provide an emergency brake of the above mentioned character, wherein means is provided for adjusting the brake band with respect to the brake drum, around which the same extends circumferentially.

A further object of the invention is to provide an emergency brake of the above mentioned character, which is simple in construction, inexpensive, strong and durable, and further well adapted for the purposes for which it is designated.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawing, forming a part of this specification, and in which like numerals designate like parts throughout the several views:

Figure 1 is a side elevation of the emergency brake embodying my invention.

Figure 2 is a cross sectional view, and

Figure 3 is a detail perspective view of one of the brackets.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates the usual hub brake drum of the usual Ford emergency brake, the same being removed from the drive wheel with which it is usually associated, and secured to the axle housing 3, in an inverted manner, as more clearly illustrated in Figure 2. A drum of a greater diameter is adapted to be secured to each of the drive wheels 2 and is indicated at 4 in the drawing. The drums are arranged in concentric relation, and furthermore the open faces thereof oppose each other.

Secured to the drum 1, at diametrically opposite points are the brackets 5 and 6 respectively. The same extend outwardly adjacent the inner open face of the drum 4, in the manner as also clearly illustrated in Figure 2. A block 7 is secured on the outer end of the bracket 6, by any suitable fastening means shown at 8, and the same is disposed in spaced relation with respect to the drum 4. An adjusting screw or stud 9 is threaded transversely through the block 7, for the purposes hereinafter to be more fully described.

The bracket 5 has its outer end reduced as illustrated at 10, and the same extends a suitable distance beyond the drum 4. A lateral extension 11 is formed on the bracket 5, and the same is disposed at an angle with respect thereto, as clearly illustrated at Figures 1 and 3 of the drawing, the lateral extension being further provided with a slot 12. The inner end of each of the brackets is curved to conform with the contour of the drum 1 which is secured to the rear axle housing 3.

Adapted to extend circumferentially around the drum 4 is the brake band 13, the same having the usual brake lining 14 secured to the inner face thereof for contact with the periphery of the drum 4. A casting 15 is secured on the outer face of the brake band 13, adjacent one end thereof, and pivotally secured to the casting, as at 16, is the brake lever 17. The brake lever is pivotally secured at its upper end to one end of an arm 18, the opposite end of the arm being connected to an additional arm 19, which is secured pivotally, at its lower end, to the axle housing, the upper end thereof being connected to the usual brake rod 20. The outer end 10 of the bracket 5 forms an abutment for the brake lever 17, whereby the laterial movement of the lever in one direction is limited.

A casting 21 is secured to the outer face of the brake band 13, adjacent the other free end thereof, and extending through the lateral extension 21′ formed on the casting 21, and also through the slot 12 provided in the lateral extension 11 formed on the bracket 5 is a threaded adjusting member 22, which is pivotally secured at its lower end to the brake lever 17, an adjusting nut 23 being threaded on the upper threaded end of the member 22, for contracting the free end of the brake band with respect to the brake drum 4, a coil spring 24 encircling the said member 22 and being disposed between the lateral extensions 11 and 21 respectively. As the purpose of this construction is well known in the art, a further detailed description thereof is not thought necessary. The portion of the brake band 13 directly opposite the free ends thereof carries thereon the usual anchor block 25 and the adjusting means 9 heretofore described provides a

means whereby the portion of the brake band associated with the anchor block 25 may be moved into engagement with the drum, for the purposes also well known in the art. A grease retainer 26 is arranged within the drum 4, around the hub of the wheel 2, and for the purpose of draining any of the oil which may collect within the drum 4 and the drum 1, a drain pipe 27 communicates with the drum 1 and extends downwardly therefrom.

The provision of an emergency brake of the above mentioned character, which is especially adapted to be used on automobiles of the Ford type will be inexpensive, yet strong and durable, and all times positive and efficient in carrying out the purposes for which the same is designated.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape, and arrangement of parts may be resorted to, without departing from the spirit of the invention and the scope of the appended claim.

Having thus described my invention, what I claim is:

In combination with the rear axle housing and drive wheels of a motor vehicle; a drum secured to one drive wheel, a second drum secured to one end of the axle housing exteriorly thereof and having a diameter smaller than the diameter of the first drum so as to be disposed therein, a pair of brackets secured to the second drum which is positioned on the rear axle housing, said brackets extending in diametrically opposite directions from the drum to which they are attached and extending outwardly therefrom to terminate beyond the periphery of the first drum, a brake band extending circumferentially around the drum on the wheel, means associated with one bracket for actuating the ends of the brake band toward each other for frictional engagement with the drum on the wheel, and means carried by the other bracket for supporting the intermediate portion of the brake band.

In testimony whereof I affix my signature.

FRED SCHMIDT.