O. N. APPLEQUIST.

SAFETY DEVICE FOR AUTOMOBILES.

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1,073,385.

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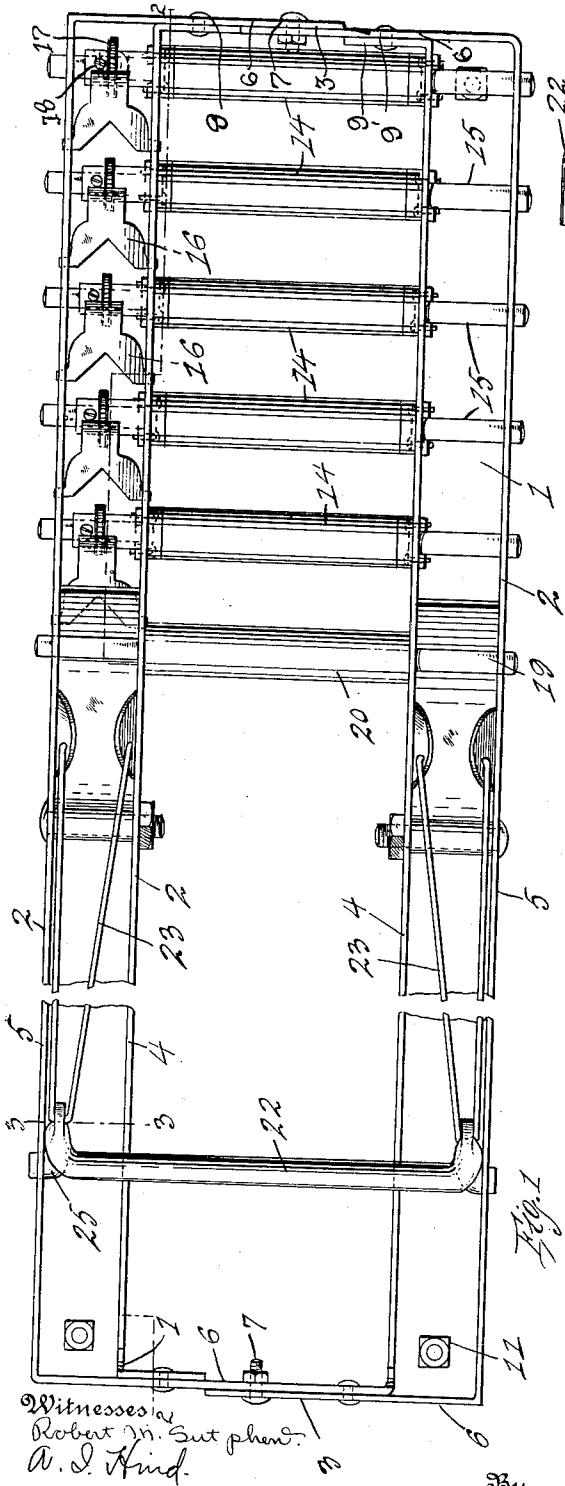


Fig. 1

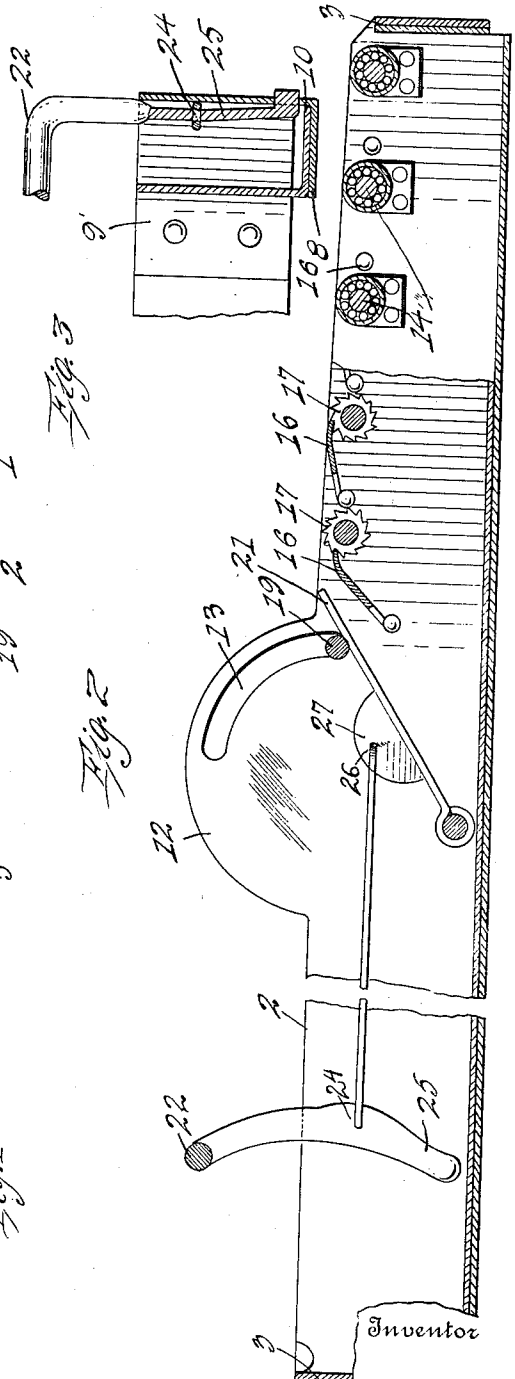


Fig. 2

Fig. 3

Witnesses:
Robert W. Sutphen
A. L. Hind.

Inventor
O. N. Applequist.
By Watson E. Coleman
Attorney

UNITED STATES PATENT OFFICE.

OTTO NATHANIAL APPLEQUIST, OF COUNCIL BLUFFS, IOWA.

SAFETY DEVICE FOR AUTOMOBILES.

1,073,385. Specification of Letters Patent. Patented Sept. 16, 1913.

Application filed December 2, 1912. Serial No. 734,561.

To all whom it may concern:

Be it known that I, OTTO N. APPLEQUIST, a citizen of the United States, residing at Council Bluffs, in the county of Pottawattamie and State of Iowa, have invented certain new and useful Improvements in Safety Devices for Automobiles, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in safety devices for automobiles and further provides for a testing device whereby the wheels of the machine may be rotated without movement of the machine.

A further object of this invention is the provision of a device of this character which is adapted to be embedded in the floor of a garage and which consists of a frame having a plurality of rollers in one end thereof and a trip rod in the front portion of the frame which is adapted to be engaged by one of the front wheels of the machine and raise one of the rollers, so that the drive wheels will engage the raised roller and prevent forward movement of the machine.

A still further object of this invention is the provision of a device of this character in which locking means for the rollers are provided so that the rollers will be held stationary upon rearward movement of the machine.

With these and other objects in view, my invention consists in the novel constructions, combinations, and arrangements of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which,

Figure 1, is a top plan view of my device, Fig. 2, is a section on the line 2—2 of Fig. 1, and Fig. 3, is a section on the line 3—3 of Fig. 1.

Referring more particularly to the drawing, the numeral 1 indicates the frame of the device which comprises side sections 2 and the end members 3. Each of the side members comprise inner and outer spaced walls 4 and 5 respectively, the outer walls being formed with reduced inwardly bent extensions 6 at their opposite ends which are connected to each other by bolts 7 or other suitable fastening devices. The lower ends of the outer walls 5 are bent inwardly to form flanges 8 for their entire length, and the inner walls 4 are formed at their opposite ends with inwardly projecting extensions 9 which are secured by rivets 9′ to the extensions 6 of the outer walls, and the inner walls are also formed on their lower edges with outwardly extending flanges 10 which are adapted to bear against the inwardly extending flanges 8 of the outer walls and are secured thereto by bolts 11 or any other suitable fastening devices. Each of the walls of the side sections are formed intermediate of their ends with upstanding portions 12, which are provided with arcuate slots 13, the purpose of which will be hereinafter more fully described. A plurality of spaced rollers 14 are mounted in the rear portion of the device, the rollers being provided on their opposite ends with reduced extensions 15 which are adapted to project through the walls of the sections for holding the rollers in position in the frame. Mounted between the walls of one of the sections, adjacent the rollers, are a plurality of pawls or dogs 16 which are adapted to engage the ratchets 17, which are secured upon the reduced extensions of the rollers by suitable set screws 18. Mounted in the arcuate slots 13 of the upstanding portions 12 of the walls are the reduced ends 19 of a roller 20, and pivotally connected between the walls at a point below the uppermost points of the arcuate slots, are levers 21, the upper ends of which are adapted to bear against the reduced portions of the roller 20. A substantially U shaped trip rod 22 is pivotally mounted between the walls of the frame near the forward end thereof, and connecting the opposite ends of the trip rod 22 and the intermediate portions of the levers 21 are connecting rods 23. The rods 23 are formed of heavy spring wire, and the intermediate portions thereof are engaged in the apertures 24 in the arms 25 of the trip rod, the opposite ends of said rod being offset inwardly as at 26 and engaged with the forwardly extending apertured ears 27 of the levers 21.

The operation of my device is as follows: In the practical use thereof, the frame is embedded in the floor of a garage with the forward or trip rod end thereof facing the wall of the garage, and the automobile is adapted to be driven upon the frame so that the front wheels thereof will actuate the trip rod 22 and raise the roller 20 to its highest position. The front wheels of the machine are then adapted to pass beyond the frame, thereby bringing the rear wheels of the ma-

chine on the rollers 14, so that the rear wheels will engage the raised roller 20. When in this position, it will be seen that should the engine be cranked while in gear with the drive wheels, forward movement of the machine will be prevented by the engagement of the drive wheels with the rollers 14 and the raised roller 20. When it is desired to remove the machine from the frame, it is merely necessary to back the machine and it will be seen that the rollers are prevented from turning by the pawls 16 engaging with the ratchets 17 on the rollers. When the front wheels of the machine engage the raised roller 20, they will move the roller to its lowest position and at the same time raise the trip rod 22 so that the device is again ready for use.

It is to be understood that the device can also be used as a tester for automobiles, it being merely necessary to place the machine on the rollers so that the rear wheels will engage the raised roller 20 and rest on the rollers 14 and the engine may be started and run at any desired speed so that the operator may easily become familiar with the actual condition of the motor, without necessity of jacking up the rear wheels of the machine.

From the above description, taken in connection with the accompanying drawing, it will be seen that I have provided a safety device which comprises a minimum number of parts, and which may therefore be cheaply manufactured, and also one which will be ready for use at all times and which will fulfil all the requirements of such a device.

While the construction illustrated in the accompanying drawing is the preferred embodiment of my invention it is to be understood that minor changes in construction may be made without departing from the spirit of my invention or sacrificing any of its advantages as determined by the scope of the appended claims.

Having thus fully described my invention what I desire to claim and secure by Letters Patent is:

1. A device of the character described comprising a frame, a plurality of rollers mounted in the rear portion of the frame, and means connected to one of said rollers and to the forward portion of the frame for raising said roller into the path of the rear wheels of an automobile, as and for the purpose described.

2. A device of the character described comprising a frame having arcuate slots formed therein, a plurality of rollers mounted in the rear portion of said frame, a single roller mounted in said slots, and means connected to said single roller whereby said roller will be moved in said slot, as and for the purpose described.

3. A device of the character described comprising a frame having arcuate slots formed therein, a plurality of rollers mounted in said frame, a single roller mounted for movement in said slots, a trip rod pivotally mounted in said frame, and means for connecting said trip rod and said single roller, as and for the purpose described.

4. A device of the character described comprising a frame having arcuate slots formed therein, a plurality of rollers mounted in said frame, a single roller mounted for movement in said frame, means for connecting said trip rod and said single roller, and means for preventing rotation in one direction of said plurality of rollers.

5. A device of the character described comprising a frame, a plurality of movable supports mounted in said frame to support the rear wheels of a vehicle, a member slidably mounted in said frame, and means adapted to be actuated by the front wheels of the vehicle to dispose said slidable member in the path of the rear wheels of the vehicle, as and for the purpose described.

6. A device of the character described, comprising a frame, rotatable supports mounted in said frame, and adapted to support the rear wheels of a vehicle, and means adapted to be actuated by the front wheels of the vehicle to dispose a rotatable obstruction in the path of the rear wheels of the vehicle.

7. A device of the character described, comprising a frame, rotatable supports mounted in said frame and adapted to support the rear wheels of a vehicle, a rotatable member slidably mounted in said frame, and means adapted to be actuated by the front wheels of the vehicle to dispose said slidable and rotatable member in the path of the rear wheels of the vehicle, substantially as and for the purpose described.

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

OTTO NATHANIAL APPLEQUIST.

Witnesses:
CHAS. A. BENO,
WALTER H. ATWOOD.

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