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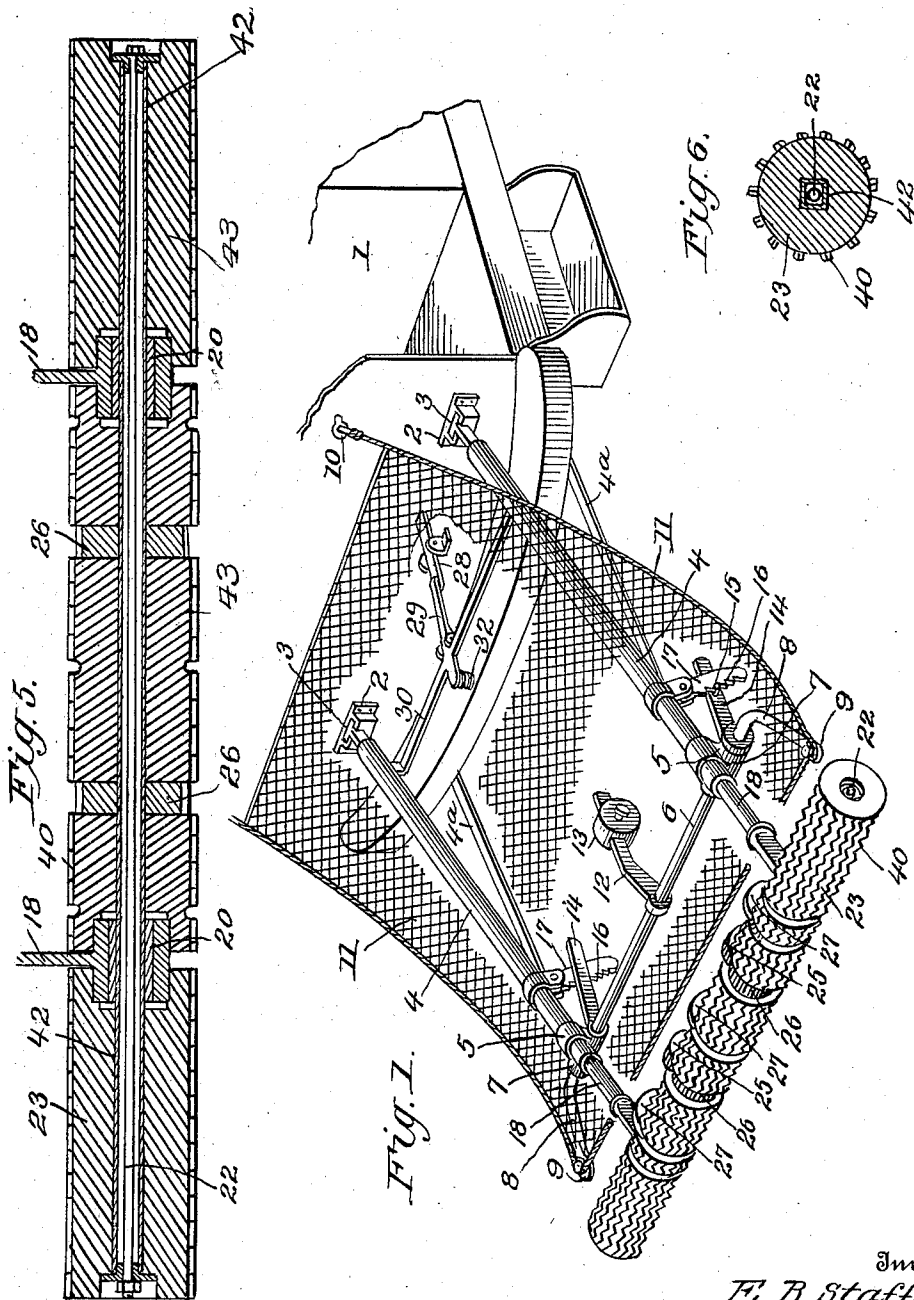
FENDER.

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2 SHEETS—SHEET 1.



Witnesses

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2 SHEETS-SHEET 2.

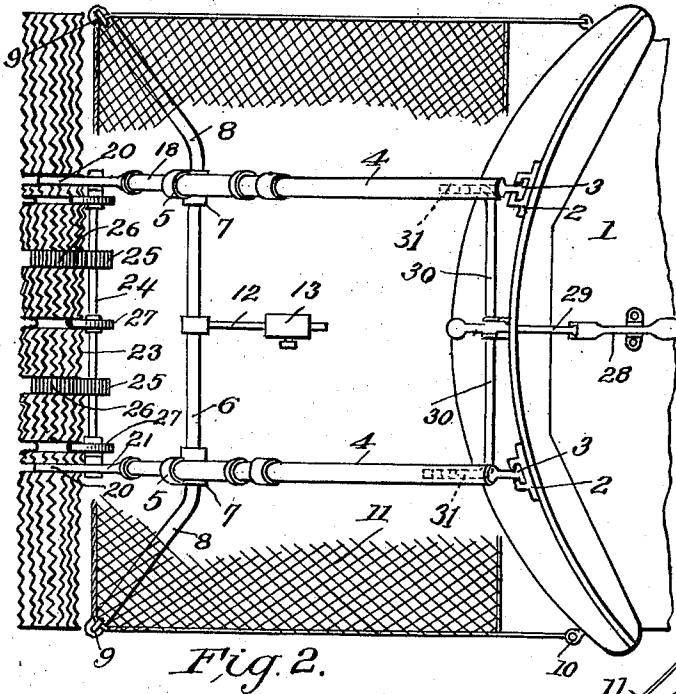


Fig. 2.

Fig. 3.

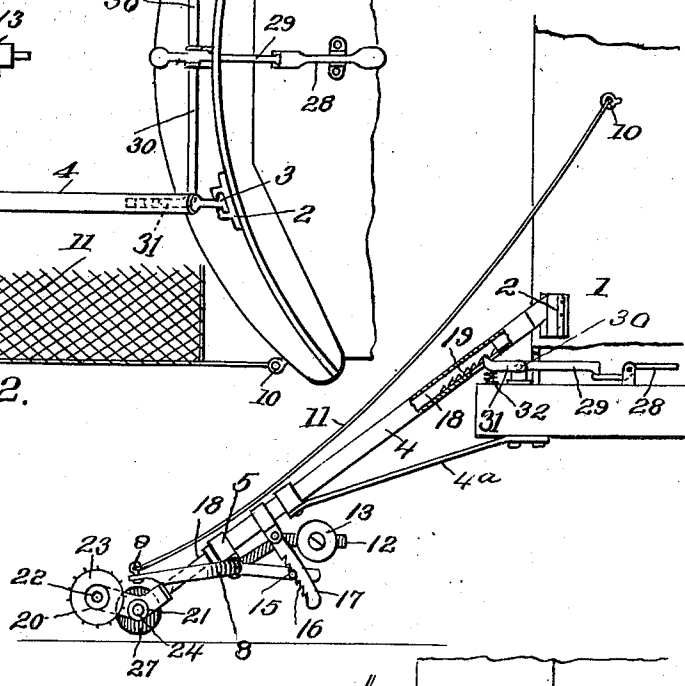
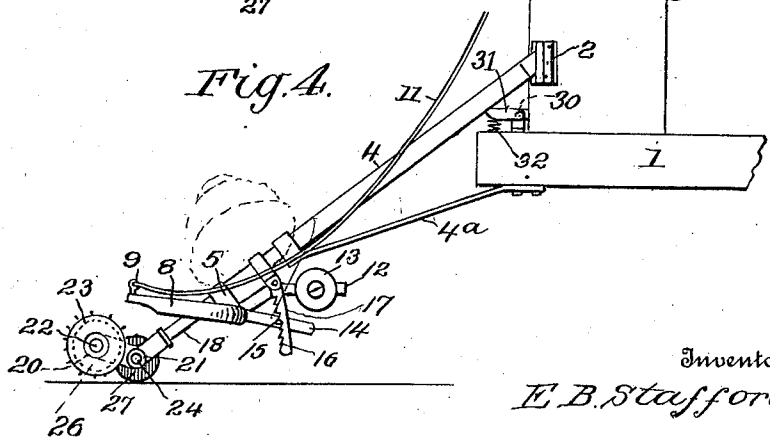


Fig. 4.



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FENDER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD BURKE STAFFORD, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Fenders; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in fenders for cars or motor vehicles.

The object of the invention is to provide a telescopic frame carrying means for picking up a person and throwing him upon a supporting net work.

A further object of the invention is to provide specific means whereby when a person is taken up by the fender the supporting net will be automatically dipped and held in this position to form a basket like receptacle to catch and hold the person.

The invention also comprehends improvements in the details of construction and arrangement of parts which will be hereinafter described and particularly pointed out in the claims.

In the drawings: Figure 1 is a perspective view of my improved fender. Fig. 2 is a plan view of the same. Fig. 3 is a side elevation, the forward part of the fender being raised. Fig. 4 is a similar view, but illustrating the forward part of the fender lowered. Figs. 5 and 6 are sections of the cushion roll.

1, indicates a car, to the dash board of which is secured socket members 2, to receive the T-heads 3 of two downwardly inclined tubes 4, the bottoms of the members being closed to support the heads 3.

Secured to the under side of the platform and extending forwardly therefrom, are brace rods 4^a, the forward ends of said rods being permanently secured to the tubes 4, which, with the shaft 6, form a rigid frame structure for supporting the operating mechanism of the fender.

Each tube has a clip 5 secured near the lower end in the bottom of which is formed a bearing 7 for a shaft 6. The ends of the shaft 6 are deflected downwardly and for-

wardly as at 8 to form cranks and are provided with eyes 9. Supported in the eyes 9, and eyes 10, projecting from the dash board of the car, is a net 11, which may be of any suitable construction, and which is designed to receive the object picked up by the fender.

On the shaft 6, is an arm 12 having a weight 13, which acts as a counterbalance when the shaft is turned in its bearings. Extending from the shaft 6, are two arms 14, each of which has a stud or projection 15, designed to engage with a series of teeth 16 on two pivotally mounted rack bars 17, depending from the tubes 4.

Telescoping in each of the tubes 4, is a rod 18, having a series of teeth 19 at its upper end and flattened at its lower end, and in the flattened portion are formed two bearings 20, and 21. Mounted in the bearing 20 is a shaft 22 carrying a roll 23 on the periphery of which are rubber sections which act as a buffer when an object is encountered. In the bearing 21 is mounted a shaft 24 and rigidly secured thereto are gear wheels 25 which mesh with gear wheels 26 on a hollow bushing 42 on the shaft 22. Also mounted on the shaft 24 are wheels 27, designed to travel on the road surface to impart a rotary motion to the shaft 24 and through the intermeshing gears 25 and 26 to the buffer. The buffer is cut away at intervals to accommodate the wheels 26 and the flattened portions of the rods 18, as clearly shown in Fig. 2.

On the platform of the car is pivotally mounted a trip lever 28, the end of which is designed to fit under the rear end of an arm 29 extending from a rod 30, mounted in suitable bearings on the platform and provided on its ends with two forwardly extending pawls 31. The pawls are located under the tubes 4 and are normally held in elevated position by springs 32. The tubes 4 are each provided with an opening for the passage of the end of the pawls 31 to permit the latter to engage with the teeth 19, on the ends of the rods 18.

In operation, the bars 18 may be normally lowered so as to cause the wheels 27 to contact with the road surface, whereby the gears will impart a revolving motion to the buffer so as to tend to throw an object encountered by the fender rearwardly and onto the net 11. Immediately upon the object striking the net, the weight of the object

causes the net to bag in basket form, and in so doing the cranked ends 8 of the shaft 6 are thrown upwardly while the arms 14 are thrown downwardly and the projections 15 will ride over the teeth 16 and be caught thereby so as to hold the netting in a distended condition to form a receptacle for the object thrown therein by the buffer.

It is not essential that the rods 18 be normally lowered, as the same are under control of the motorman, and they may be held in an elevated position by the pawls 31. When the bars 18 are forced upwardly within the tubes 4, the pawls 31 will automatically engage the teeth 19 and hold the rods in an elevated position, and thereby lift the wheels 27 from the road surface. If the motorman should notice an object on the roadway, he will trip the lever 28 which will release the pawls 31 and the weight of the parts will cause the rods 18 and the shafts to slide downwardly and forwardly in the tubes until the wheels contact with the surface. Immediately the wheels 27 contact with the ground, the gears will impart the necessary revoluble motion to the buffer to throw the object into the netting.

By constructing a fender in the manner set forth, it is evident that when the buffer encounters an object, or a person, the impact is reduced to a minimum and by frictional contact will gradually roll the object rearwardly onto the net. Furthermore, by reason of the construction of the means for supporting the net in a distended position, the weight of the object will automatically form a pocket or receptacle which will preclude said object from rolling from the net.

The roll 23, is preferably made of rubber, and the ribs 40 assist in frictionally engaging an object to roll same on the net. The shaft 22, passes through a hollow bushing 42, on which the bearings 20 are mounted. The roll 23, is formed of a series of sections 43, mounted on the hollow bushing and abutting against the gears 26, and the bearings 20. The sections are locked in assembled position by end nuts 44.

What I claim is:

1. In a car, the combination of a frame comprising telescopic members, a revolving buffer at the end of the telescopic members, means mounted on the telescopic members and including wheels adapted to contact with the ground for revolving the buffer, when said telescopic members are lowered, means for lowering the telescopic members, a net in rear of the buffer, means operable by an object falling into the net, including a latch and a counterbalance for holding the net in loose position to form a receptacle for said object.

2. In a fender, the combination with a frame having stationary inclined tubular members, rods telescoping in the tubular

members, two sets of bearings formed in the rods, a shaft mounted in the first set of bearings in the rods, wheels supported on the shaft for frictionally engaging the surface when the rods are lowered, gear wheels on said shaft, a second shaft in the second set of bearings in the rods, a buffer on the shaft which is at all times located above the surface of the roadway, gear wheels on said second shaft for meshing with the gear wheels, on the first mentioned shaft, means for normally holding the rods in elevated position in the tubular members, a trip for releasing said rods, a shaft mounted on the stationary inclined tubular members, the ends of the shaft being cranked, a net secured at one end to the car and at its opposite end to the cranked ends of the shaft, and means for retaining the net in a loose position when an object is thrown thereon by the buffer.

3. In a car fender, the combination of a frame having tubular members, rods telescoping in the tubular members, a buffer mounted on the rods, means for revolving the buffer, a net supported in rear of the buffer, a shaft mounted on the frame and provided with cranked ends, means for securing the net to the cranked ends of the shaft, a counterbalance on said shaft, a device for holding the net in distended position when an object falls on the net, and means for tripping the rods.

4. In a fender, the combination with a frame provided with tubular members, rods telescoping in the tubular members, two shafts mounted in the forward end portions of the rods, one of said shafts carrying a buffer and the other having wheels to contact with the road surface, gear wheels mounted upon the two shafts, a trip for holding the rods in elevated position, a shaft mounted in the tubular members and provided at its ends with cranked members, a net supported on the cranked members and the car, a counterbalance on the last named shaft, a rack pivoted to one of the tubular shafts, and an arm extending from the shaft and engaging the pivoted rack, whereby to hold the net in a loose position when an object is thrown thereon by the buffer.

5. In a fender, the combination of a frame, front and rear bearings on the front portion of the said frame, a hollow bushing mounted in the front bearings, a rod extending there-through, a series of sectional rolls mounted on the hollow bushing, said rolls being provided with a plurality of outwardly extended zigzag rubber ribs, gears on the bushing between the sectional rolls, a shaft mounted in the rear bearings, gears on the shaft to engage the first mentioned gears, friction rolls on the said latter shaft, means for raising and lowering the shaft to cause the friction rolls to engage the road surface to re-

5 involve the sectional rolls, a crank shaft mounted on the frame, a net secured at one end to the front of the car and at its opposite end to the cranked portions of the shaft, and means for holding the net in a loose position when an object is thrown thereon.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

EDWARD BURKE STAFFORD.

Witnesses:

JOHN K. McMAHON,
JOHN H. JACKSON.

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