V. L. ROBERTSON.

AUTOMOBILE EXTRICATOR.

APPLICATION FILED JUNE 20, 1917.

1,258,466. Patented Mar. 5, 1918.

Fig. 1.

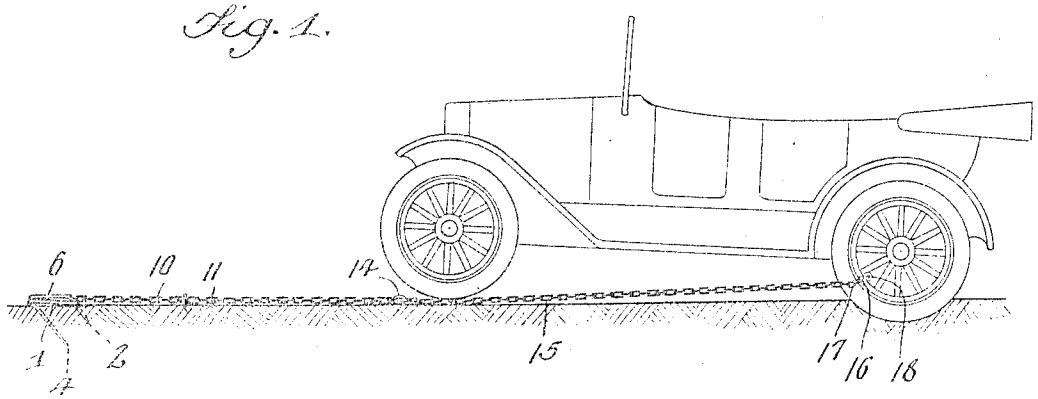


Fig. 2.

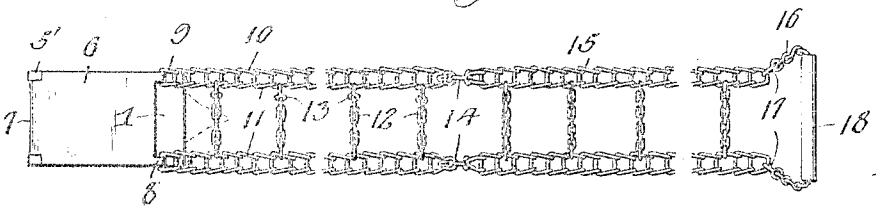


Fig. 3.

Fig. 4.

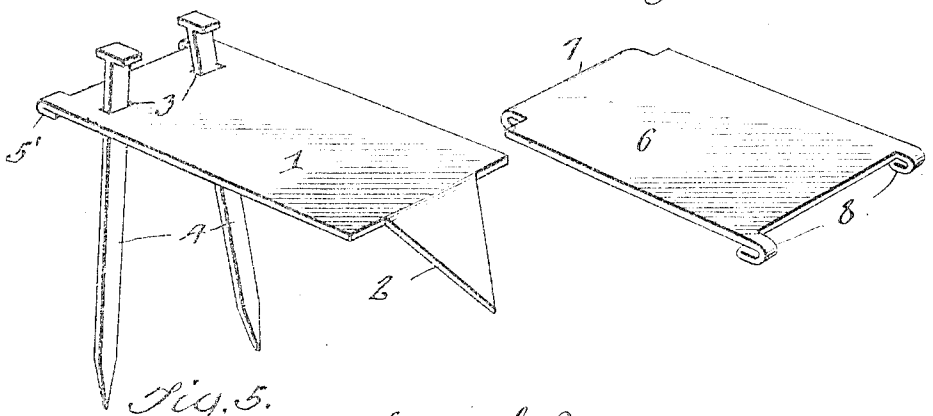
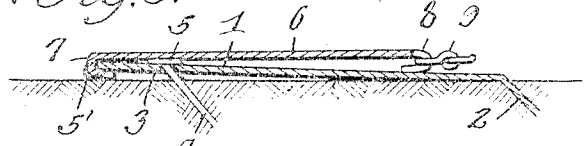


Fig. 5.



WITNESSES

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AUTOMOBILE-EXTRICATOR.

1,258,466. Specification of Letters Patent. Patented Mar. 5, 1918.

Application filed June 20, 1917. Serial No. 175,879.

To all whom it may concern:

Be it known that I, VICTOR L. ROBERTSON, a citizen of the United States, residing at Rexburg, in the county of Madison and State of Idaho, have invented new and useful Improvements in Automobile-Extricators, of which the following is a specification.

This invention relates to automobile extricators the object in view being to provide portable means, capable of being carried in one of the compartments of a motor vehicle, whereby a motor vehicle is adapted to extricate itself from a mired position or difficult place under its own power and without any extraneous devices other than the extricating apparatus carried thereby.

The main feature of the present invention resides in the use, in combination with a flexible chain, of novel anchoring means for securing one end of said chain in fixed relation to the road surface, said anchoring means embodying two normally coupled or interlocked members capable of automatically separating one from the other when the motor vehicle reaches a predetermined point in its path of travel.

A further object in view is to provide an anchoring device, as a whole, of such construction that the anchor is extricated from the road surface automatically when the vehicle reaches a predetermined point in its path of travel.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts, herein fully described, illustrated and claimed.

In the accompanying drawings:—

Figure 1 is a side elevation showing the manner in which the extricator is used.

Fig. 2 is a plan view of the extricator detached from the vehicle.

Fig. 3 is a detail perspective view of the main body of the anchor.

Fig. 4 is a similar view of the coupling member, and

Fig. 5 is a detail view showing the relation of the anchoring member and coupling member to each other.

The extricator contemplated in this invention comprises a base plate or anchoring plate 1 of any suitable width and length, the same being provided at its forward end or that end which faces the vehicle with a large spur or prong 2 adapted to be driven into the road surface, the prong 2 being inclined with relation to the body of the plate at an angle of approximately 45°, more or less. Adjacent to its rear end the anchoring member or base plate 1 is formed with transversely elongated holes 3 to receive flat spikes 4 having heads 5 adapting them to be driven into the ground through holes 3, the holes 3 being inclined as shown so that the spikes 4 may be driven into the road surface at an inclination in the same direction as the toe spur or prong 2. The plate 1 is further provided at its opposite rear corners with lugs or stops 5′, the purpose of which will appear.

6 designates a coupling plate of any suitable width and length, having at the rear end thereof a broad hook 7 the length of which is slightly less than the distance between the lugs or stops 5′. The hook 7 is adapted to engage the rear edge of the anchor plate 1 as best shown in Fig. 5. At its forward end, the plate 6 is provided at the opposite corners thereof with hooks 8 which are adapted to engage the terminal eyes 9 of an extension chain 10 embodying the longitudinal side members 11 and the cross chains 12, each of the cross chains 12 being fixedly connected at one end to one of the longitudinal members or chains 10 and being provided at its opposite ends with a hook or snap 13 by means of which said ends of the cross chains may be detached from the adjacent side chain or longitudinal member.

The extension chain referred to is adapted to be connected by hooks and eyes as shown at 14 to an ordinary antiskid chain designated generally at 15. At its rear end, the chain 15 has connected thereto a short chain 16 provided at one or both ends with snap hooks 17. The chain 16 is thus detachably connected at one or both ends to the rear end of the antiskid chain and passes through a flexible tube 18 of rubber or like material, enabling the chain to be attached to one of the spokes of the rear wheel of a motor car, the rubber tube preventing chafing and marring the finish of the spoke which it engages and also the felly adjacent thereto.

In the use of the extricating apparatus hereinabove described, two sets of chains and anchors are employed, one for attach-

ment to each of the rear driving wheels of the vehicle. The anchoring plates 1 are first firmly anchored to the road surface by the means described and then the coupling plates 6 are associated with the anchor plates in the manner illustrated. The extension chains are then coupled to the antiskid chains and also connected to the hooks 8 of the coupling plates 6. The rear ends of the antiskid chains are then connected to the rear wheels in the manner described. Power is then applied to the rear driving wheels of the vehicle, causing the antiskid chains and the extension chains to be wound upon and around the driving wheels of the vehicle. The front wheels readily pass over the anchoring plates and the coupling plates and immediately after passing thereover, the coupling plates 6 are swung upwardly on their hooked connection with the anchor plates. This serves to pull upwardly on the spikes 4, dislodging the same from their positions, and immediately thereafter the hooks 7 disengage themselves from the anchor plates 1. The vehicle may continue to a suitable position and the anchor plates 1 may then be recovered and placed in the vehicle. By backing the vehicle, the chains may be unwound from the driving wheels thereof and removed and also placed in the vehicle.

It is of course to be understood that the same apparatus enables the vehicle to extricate itself in a rearward direction by simply extending the chains in the opposite direction from the rear driving wheels to which they are fastened and locating the anchoring and coupling means accordingly.

I claim:—

1. In an automobile extricator, the combination of a flexible chain, means for attaching one end of said chain to one of the driving wheels of a motor vehicle, an anchoring means for said chain comprising an anchor plate, means for securing said anchor plate in fixed relation to the road surface, and a coupling plate to which said chain is connected, one of said plates having a hooked and self-releasing connection with the other, one of said plates embodying lugs in spaced relation to each other, and the other plate comprising a hook fitting between said lugs.

2. In an automobile extricator, the combination of a flexible chain, means for attaching one end of said chain to one of the driving wheels of a motor vehicle, an anchoring means for said chain comprising an anchor plate, means for securing said anchor plate in fixed relation to the road surface, a coupling plate to which said chain is connected, said coupling plate having a hooked and self-releasing connection with said anchor plate, said hooked and self releasing connection embodying lugs at the heel end of the anchor plate in spaced relation to each other, and a hook at the corresponding end of the coupling member fitting between said lugs and embracing the rear edge of the anchor plate.

In testimony whereof I affix my signature.

VICTOR L. ROBERTSON.