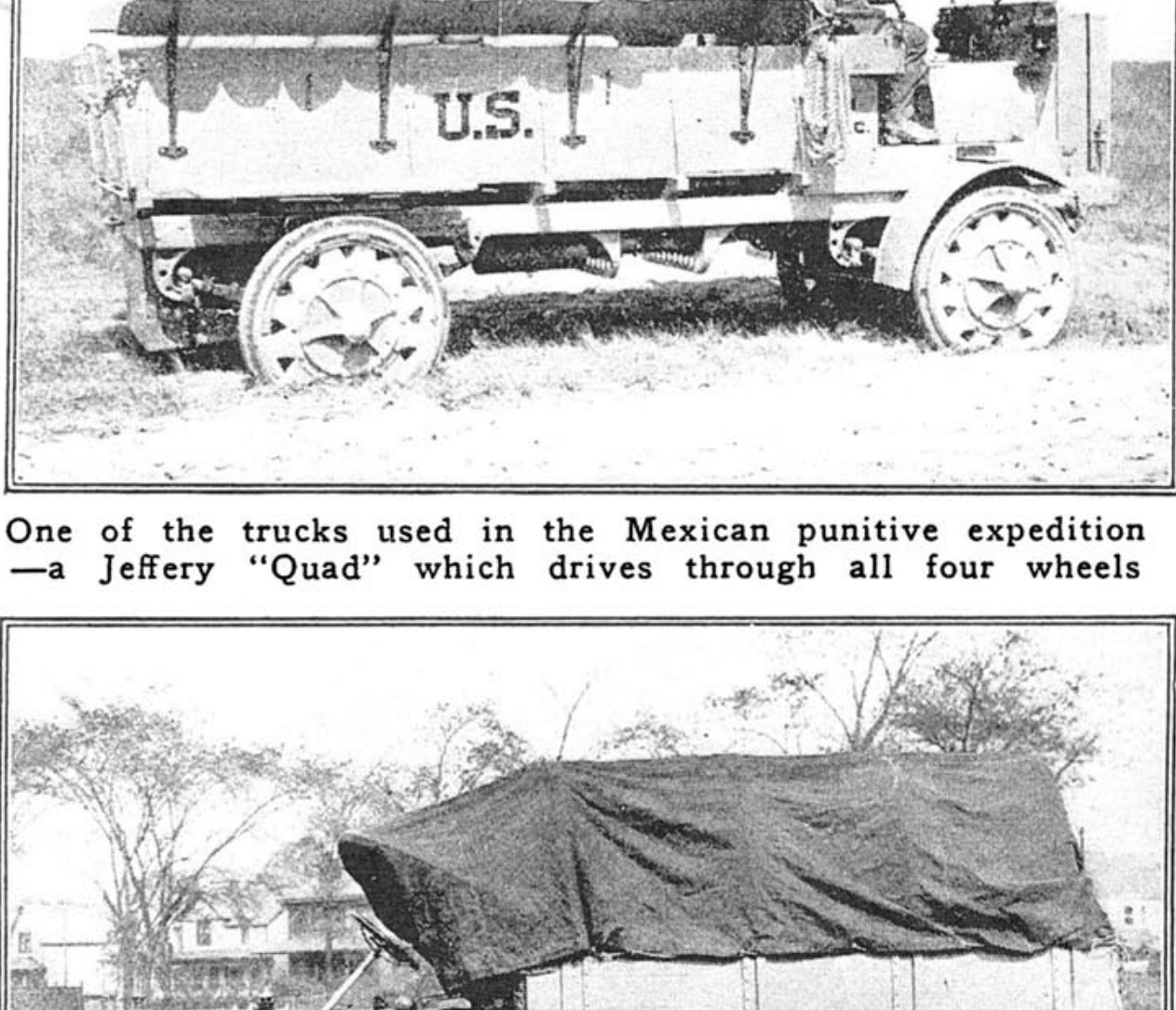
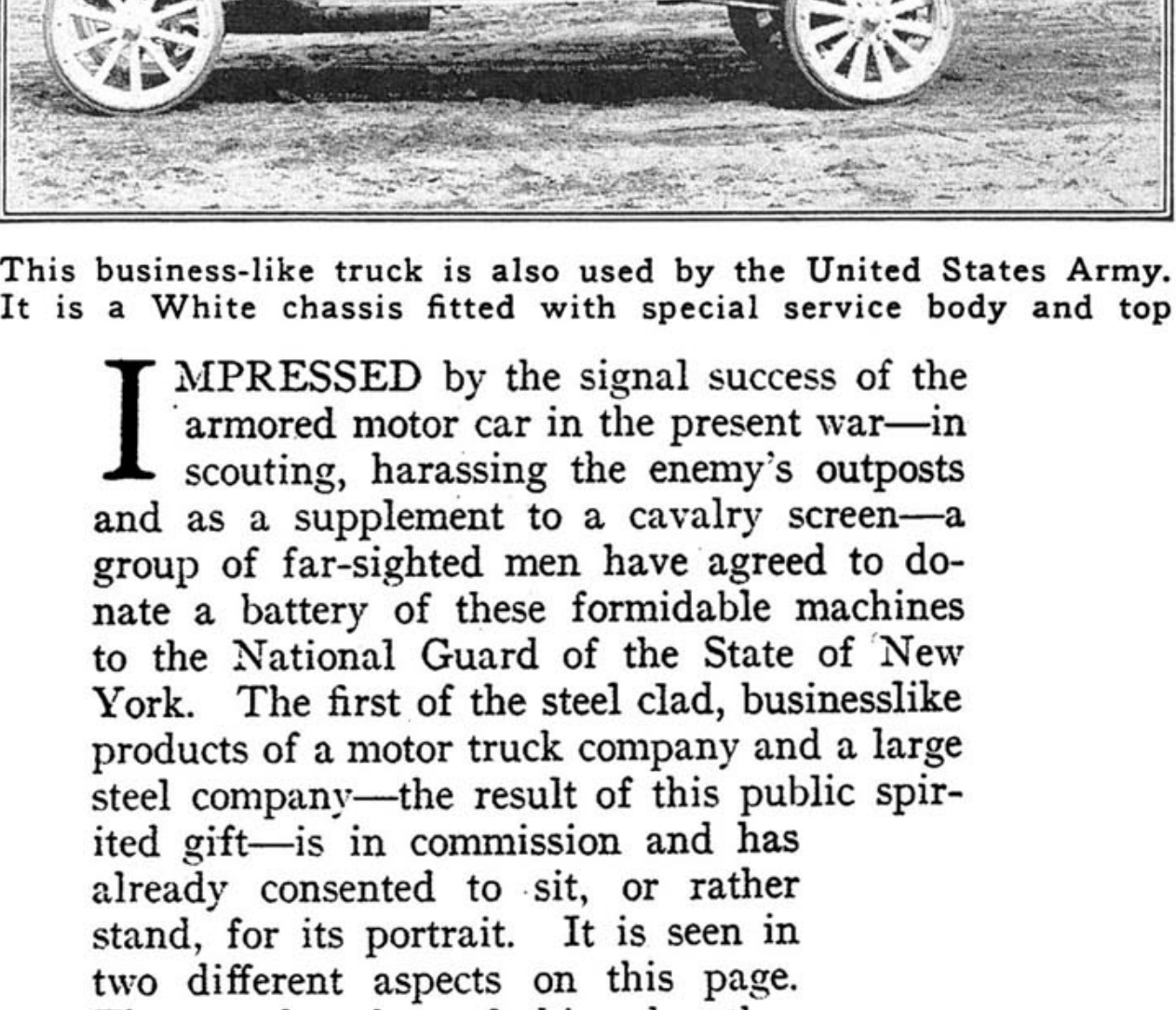


MOTOR CARS WARLIKE AND OTHERWISE

*A New Armored Truck for the
New York National Guard*



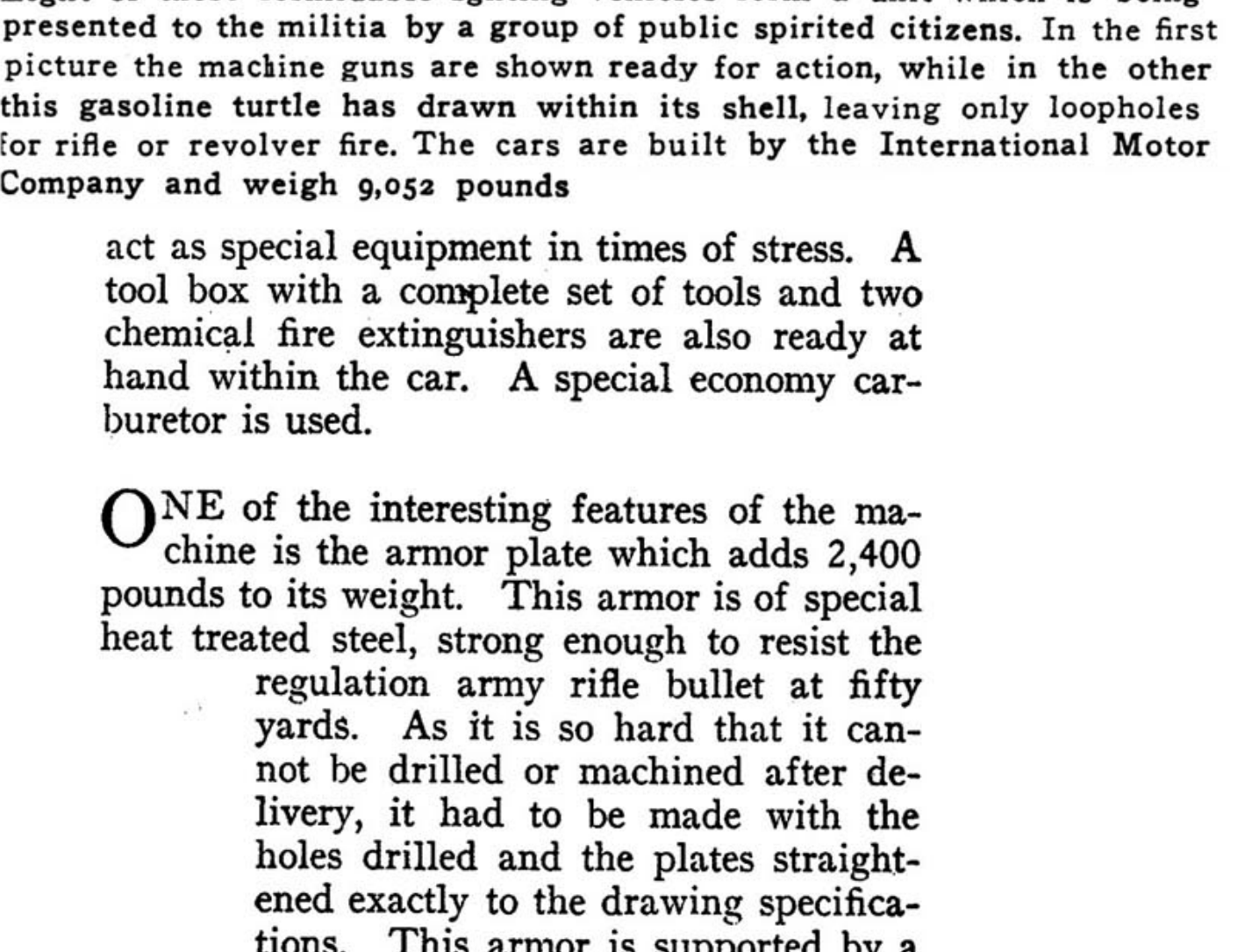
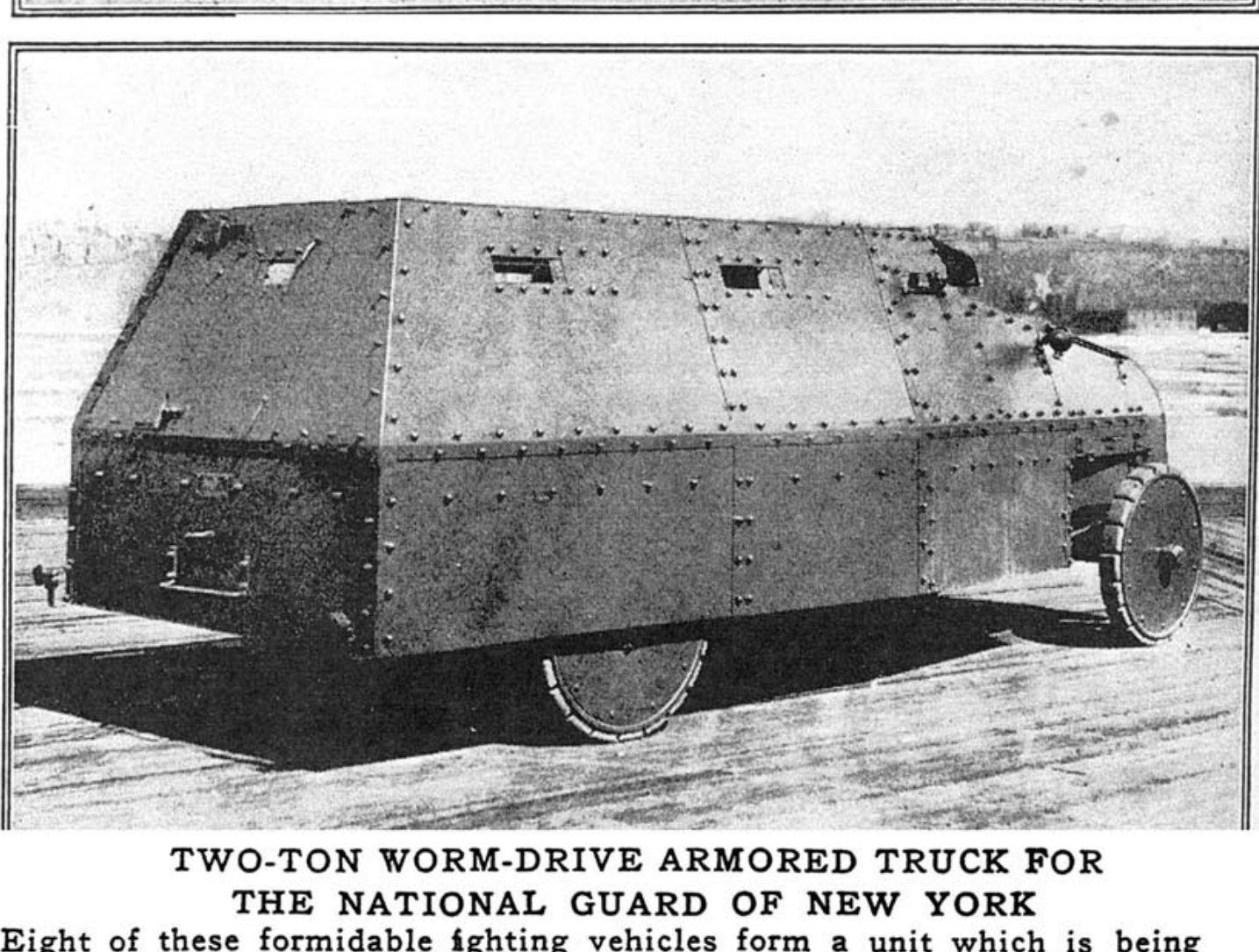
One of the trucks used in the Mexican punitive expedition—a Jeffery "Quad" which drives through all four wheels



This business-like truck is also used by the United States Army. It is a White chassis fitted with special service body and top

IMPRESSED by the signal success of the armored motor car in the present war—in scouting, harassing the enemy's outposts and as a supplement to a cavalry screen—a group of far-sighted men have agreed to donate a battery of these formidable machines to the National Guard of the State of New York. The first of the steel clad, businesslike products of a motor truck company and a large steel company—the result of this public spirited gift—is in commission and has already consented to sit, or rather stand, for its portrait. It is seen in two different aspects on this page. The car has been fashioned rather closely after foreign models, and the builders have had the benefit of consulting with men who have had experience with similar units in France and Belgium. The result is a machine which gives every promise, from superficial appearance and equipment, of being able to render an exceedingly good account of itself in case of need. This bellicose motor car, the joint gift of a group of men including E. H. Gary, H. C. Frick, R. M. Thompson, D. Olcott, J. N. Wallace and H. G. Montgomery, may best be described by taking up its chief component parts separately.

IN the first place, the chassis is a standard two-ton, worm-drive unit such as is built by the makers for commercial purposes, except that the steering wheel and control levers have been arranged to allow the driver to sit very low in the car so that the machine guns will fire over his head. This chassis weighs 5,000 pounds with its full equipment. The car is fitted with an electric starting and lighting system, with enclosed drive to the generator and to the flywheel. For lights it carries a ten inch electric searchlight, so mounted that it can be enclosed in the driver's cab or compartment and thus be protected. This lamp is operated by a separate switch for signalling purposes. In addition, two small headlights are fitted in the very front of the car near the ground so as to concentrate the light low and eliminate reflection from the sides of the car. There are two red tail lights on the rear corners, a dash lamp to make the gauges legible and an extension or trouble lamp to use for work at the guns if any repairs are required or if the other parts of the mechanism need attention. Two fire department emergency lanterns are also fitted in the interior car to



TWO-TON WORM-DRIVE ARMORED TRUCK FOR THE NATIONAL GUARD OF NEW YORK

Eight of these formidable fighting vehicles form a unit which is being presented to the militia by a group of public spirited citizens. In the first picture the machine guns are shown ready for action, while in the other this gasoline turtle has drawn within its shell, leaving only loopholes for rifle or revolver fire. The cars are built by the International Motor Company and weigh 9,052 pounds

act as special equipment in times of stress. A tool box with a complete set of tools and two chemical fire extinguishers are also ready at hand within the car. A special economy carburetor is used.

ONE of the interesting features of the machine is the armor plate which adds 2,400 pounds to its weight. This armor is of special heat treated steel, strong enough to resist the regulation army bullet at fifty yards. As it is so hard that it cannot be drilled or machined after delivery, it had to be made with the holes drilled and the plates straightened exactly to the drawing specifications. This armor is supported by a light angle iron framing built up in four units. The first covers the motor, the second forms the driver's cab, and the two rear units are for the guns, ammunition and men. These units are first riveted and then bolted together, making one complete structure. The floor is of wood on metal cross members, and the wheel boxes are of steel. An arrangement for towing extends beyond the armor with an eye or hook.

PORTHOLES, provided for the operation of the car without exposure during observations, are arranged one on each side of the driver's cab, two on each side of the body and one in the door at the rear. Their doors are made of armored steel to slide, and have anti-rattling latches. The car is entered through a rear door with step, the door being fitted with a tightening latch like those used on refrigerators. In this snug fighting machine the driver is protected by a complete armored body, the front door of which is provided with adjustable racks so that a larger or smaller vision may be obtained, looking forward. There is also an adjustable trap door over the driver's head in order to permit cooling when the car is not under fire. The wheels are protected by armor plate discs attached to the felloes. The motor is rendered as invulnerable as possible by an armored casing which consists of a hood that can be held down by anti-rattling catches; sloping side plates of armor, hinged so that they can be raised, and a belt of armor behind the wheels to protect the crankcase.

To guard the extra large radiator a special device is used so that air can reach it but bullets can not be deflected into the radiator itself. The gasoline tank is mounted behind the armor plate and under the floor. The feed is of the vacuum type. The storage battery is also shielded by the armor and is independent of the ignition system so that, even if it should become depleted, the car could still be run as well as ever.

All the bolts and nuts which hold the frame and armor together are of special steel, the nuts being heat treated and hardened to prevent the bolts being shot away. Some idea of the importance of this feature may be gathered when one learns that there are six hundred of these bolts. As a mounting for special rifles or machine guns, barbettes are provided which are detachable. They are supported on bronze brackets which, in turn, are supported by tripods from the floor. These tripods are adjustable. Two rapid fire guns are provided for by supports of this character. The total weight of the car, ready for its guns is 9,052 pounds, and the total cost \$8,476.

NOT so formidable or of such a spectacular character as this powerful fighting unit, but quite as important in their way, are the motor trucks for army transport work which are also pictured in this issue. The army has just had some valuable experience with nearly a hundred trucks of these two types in Mexico, and the way they have performed under conditions of the most adverse character has drawn down a large meed of praise from officers of every rank. Indeed, in view of the reluctance which the First Chief of Mexico showed to permit the forces of the United States to better their position by the use of railroads, these trucks proved the only method of solving the difficult problem of transport in the desert country with which General Pershing was confronted. They have gone into roadless and trackless places with a wonderful freedom from mechanical trouble and done much to justify America's claim for leadership in motorcar building. One of the types of which a picture is shown is distinguished by having its motive power supplied to all four wheels instead of to the rear two only, according to the usual custom. Many hundred trucks of this same type are doing service for the Allies who found that modern trucks could go very nearly anywhere that the mule team would find practicable, and of course with far larger loads and at far better average speed. The familiar army mule will always have his niche probably but it begins to look as if his knell had been sounded, as far as any extended use for supply transport is concerned. At least it would seem so after the experience of Europe and the more proximate experience of Uncle Sam in Mexico.

AS has been suggested in these columns before, the problem of stowing baggage for the automobile tour is no mean one, nor has it been really solved beyond the present season. In the newer cars, however, an important feature is the utilization of space within the body for the bestowal of small articles, and in these pages is illustrated one of the most complete luggage equipments for the exterior of the car which has been brought out. In this case, the running boards of the touring car have been made the repository of an unusual number of special cases and containers, each neatly fitted to the required spot so as to interfere with appearances as little as possible, and each easily fastened in place to prevent annoyances on the road