

United States Patent

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Continuation-in-part of application Ser. No.
740,961, June 28, 1968.

[50] Field of Search..... 89/36, 36
 (T), 40, 40.11

[56] **References Cited**
UNITED STATES PATENTS
 1,370,951 3/1921 Cuntz..... 89/36TUX
 3,145,620 8/1964 Even 89/36(T)
 3,351,374 11/1967 Forsyth et al. 89/36TUX

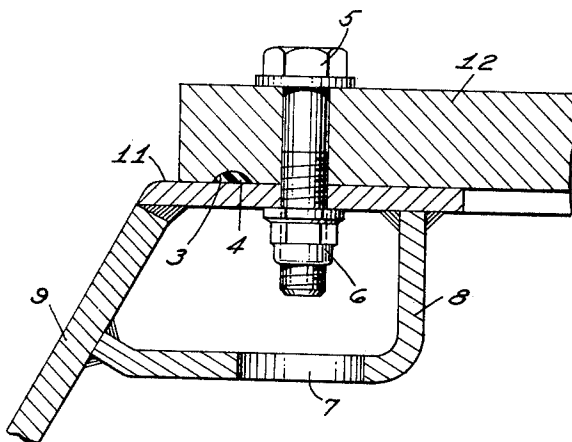
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[54] **ARMORED VEHICLE HAVING MEANS FOR
 INTERCHANGEABILITY OF TOP MOUNTED
 WEAPONRY**

1 Claim, 8 Drawing Figs.

[52] U.S. Cl..... 89/40
 [51] Int. Cl..... F41h 7/12

ABSTRACT: An armored vehicle with an open-top hull design to provide interchangeability of optional top mounted armored weapons or equipment.



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FIG. 2

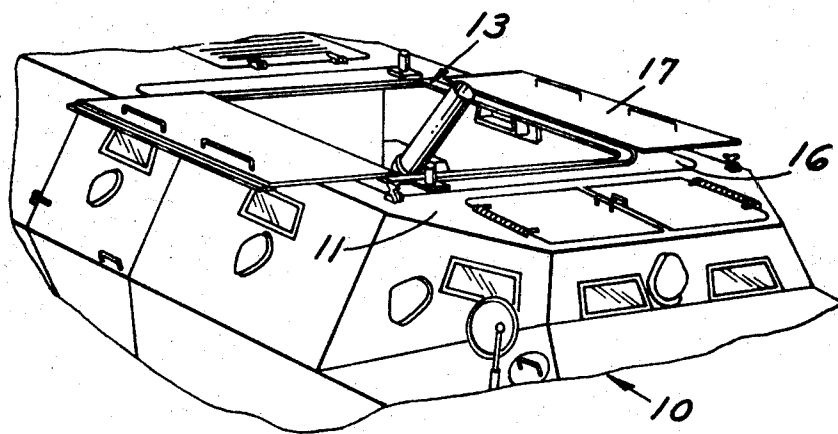
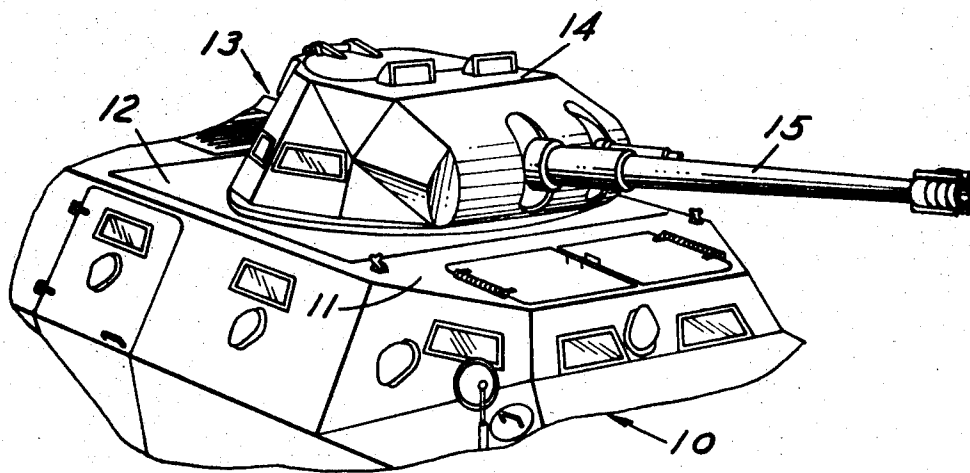


FIG. 1

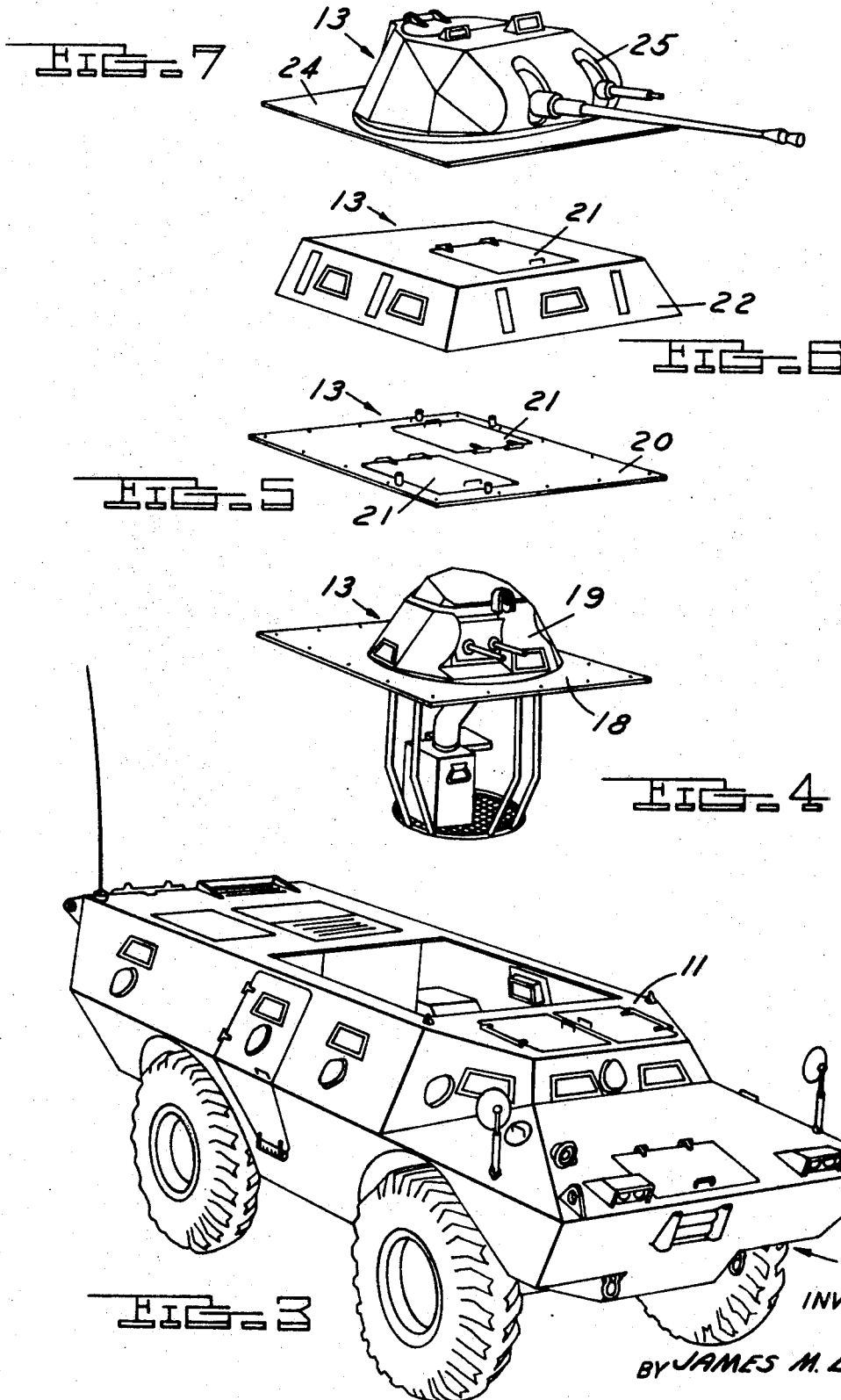


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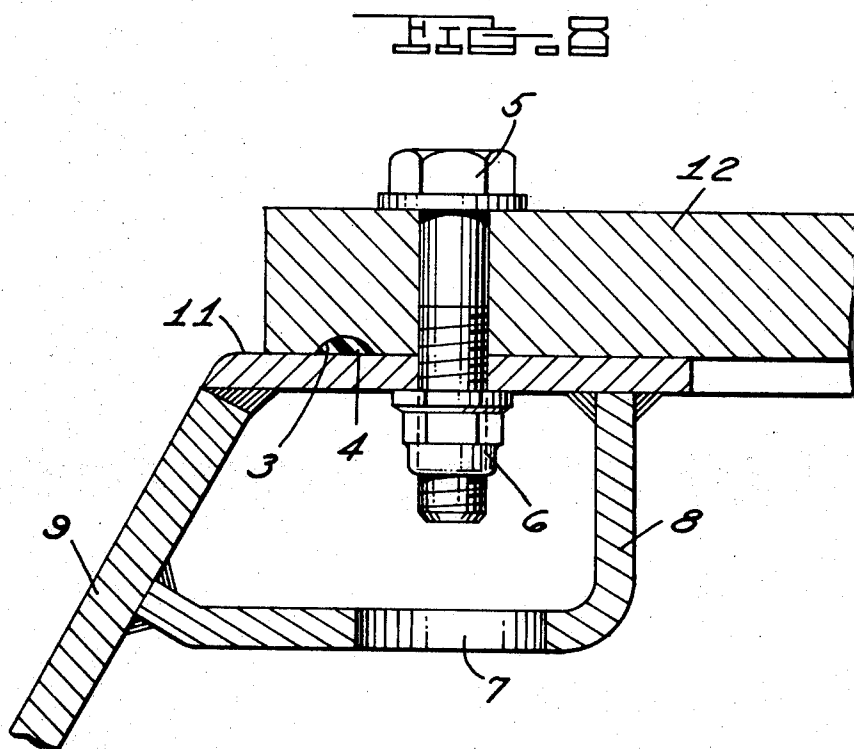


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ARMORED VEHICLE HAVING MEANS FOR INTERCHANGEABILITY OF TOP MOUNTED WEAPONRY

This application is a continuation-in-part of parent application S.N. 740,961 filed Jun. 28, 1968, now abandoned.

BACKGROUND OF THE INVENTION

This invention relates to an armored vehicle with detachably mounted armament platforms for gun mounting and in particular those equipped with automatic weaponry. In the known mountings of the type described the space below the armament platform serves to accommodate the crew and personnel for operating the vehicle.

This invention consists in that the armament platform takes the form of a self-supporting detachably mounted adapter plate as a support for various types of gun mountings. In this way the armament platform as a mounting forms a structural part of the vehicle which can be produced independently and is bolted to the body of the vehicle to constitute the armored vehicle proper. In this way various modular adaptations on the armored vehicle are realized.

SUMMARY OF THE INVENTION

This invention relates to an armored vehicle having detachably mounted armament platforms to provide various modular adaptations for interchangeability of weaponry.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a view of an armored vehicle with a armament platform having a detachably mounted adapter plate with one form of weapon.

FIG. 2 shows a detachably mounted armament platform having an adapter plate with another form of weaponry.

FIG. 3 shows a basic open-top armored vehicle without any modular adaptations mounted on it.

FIGS. 4, 5, 6 and 7 show various forms of armament platforms having detachably mounted adapter plates.

FIG. 8 shows the connecting means between the sidewalls and the top plate.

DESCRIPTION OF THE INVENTION

The present invention encompasses various modular adaptations on an armored vehicle. The vehicular body 10 shown in FIG. 1 is of a basic open-top hull design and the variation is in the armament platform. FIG. 1 shows a vehicular body 10 having open-top plate 11 and including a detachably mounted adapter plate 12 connected thereto by means of a bolt 5 and

nut 6. The nut 6 is reached through an opening 7 in roof bracing 8. The roof bracing 8 is connected between the open-top plate 11 and sidewall of hull 9. A semicircular recess or groove 3 is provided in the bottom of adapter plate 12 which abuts the surface to top plate 11. When the plate 12 is placed over the top plate 11, a seal 4 of rubber, plastic, or other material is inserted there between to prevent the external environment from entering the interior of the vehicle.

In FIG. 1, the armament platform consists of an adapter plate 12 which includes a turret 14 having 90 mm and 7.62 mm weapons 15 mounted thereon. The armament platform is adapted to be easily installed and can readily be interchanged in the field with a minimum of equipment.

FIG. 2 shows the armored vehicle comprising a vehicular body 10 and an armament platform consisting of an 81 mm mortar mount. The armament platform consists of an adapter plate which includes a hatch opening 17 to provide for accessibility to utilize the mortar weapon in combat situations.

FIG. 3 shows the basic vehicle without any detachable armament platform and shows the feasibility of utilizing various detachably mounted armament platforms. This type of construction can be utilized on a field of battle such that one type of weaponry can be substituted for another in a matter of minutes. For example, FIG. 4 shows an adapter plate 18 with a twin 30 caliber cupola weapon 19 mounted thereon.

FIG. 7 shows an adapter plate 24 with a 20 mm and 7.62 mm weapon mounted on the turret 25. However, for reasons of moving personnel from one area to another, FIG. 5 shows an adapter plate 20 having a flat top with ordinary hatch openings 21, and FIG. 6 shows a fixed turret or pod 22 adapted to be detachably mounted on an armored vehicle 10.

The extent of this invention is directed to utilization of different weaponry for use on basic open-top hull design armored vehicles. The weaponry is mounted on a standardized armament platform such that one type can be removed and substituted by another type, utilizing different forms of weaponry, with a minimum of equipment in a short period of time.

I claim:

1. In an armored vehicle having an open-top hull, the improvement comprising an interchangeable armament platform means including an adapter plate detachably mounted to the top of said armored vehicle, said adapter plate further including a semicircular recess means adjacent the outer edge of the bottom surface of said adapter plate, said recess means adapted to provide retention of a sealing means interposed between the bottom surface of said adapted plate and the top surface of said armored vehicle.

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