

Title (en)
Trunnion for the elevation axle of a gun cradle.

Title (de)
Schildzapfenlagerung für eine Geschützlafette.

Title (fr)
Tourillon d'axe de site pour affût d'armement.

Publication
EP 0412908 A1 19910213 (FR)

Application
EP 90402267 A 19900808

Priority
FR 8910764 A 19890810

Abstract (en)
[origin: US5062347A] The trunnion assembly according to the present invention has a pivot pin with a longitudinal axis defining the pivot axis of a weapon carrier with respect to a support member. A pair of pivot pins are located on either side of the weapon carrier with their longitudinal axes generally co-axial and are each mounted in the support member by a bearing enabling each of the pivot pins to readily rotate about their longitudinal axes with respect to the support members. The pivot pins, which may be supported in a mounting box attached to each of the support members, are biased in a first direction toward each other by a spring device interposed between the bearing and the mounting box. When in their most extreme biased position, the distance between them is inadequate to accommodate the insertion of the weapon carrier between them. Thus, in order to overcome the biasing force exerted on the pins in the first direction, a nut is attached to a threaded portion of the pivot pin and is prevented from disengagement from the pin via a spring clip of the like. Rotation of the nut causes it to bear against a portion of the mounting box such that further nut rotation axially moves the pin in a second direction, generally opposite to the first direction, thereby overcoming the spring biasing force and moving the pins further apart. Once in these positions, the weapons carrier may be physically inserted between the pivot pins, which then may be moved back in the first direction and be attached to the weapon carrier. Once attached, the nuts on the pivot pins are retracted away from contact with the mounting box to enable the weapons carrier to move laterally with respect to the support turret against the spring biasing forces.

Abstract (fr)
Un tourillon d'arbre pour le tourillonnement en site d'une platine (14) sur un affût d'armement est porté par un axe (112) monté serré dans la bague interne d'un roulement (121) dont la bague externe est montée coulissante à l'intérieur d'un boîtier (114), un moyen élastique étant interposé entre le roulement et le fond (117) de l'alésage (116) du boîtier (114). La platine (14) est montée sur deux tourillons en opposition et la structure selon l'invention permet de dégager le tourillon pour le montage de la platine et d'autre part assure en fonctionnement, une suspension élastique pour celle-ci.

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IPC 8 full level
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CPC (source: EP US)
F41A 27/08 (2013.01 - EP US)

Citation (search report)
• [A] US 1742436 A 19300107 - AUGUST DABRASKY
• [A] US 2564568 A 19510814 - FRANKLIN HUBERT F
• [A] FR 2192643 A5 19740208 - VOEST AG [AT]
• [A] GB 2169361 A 19860709 - SABROE & CO AS

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