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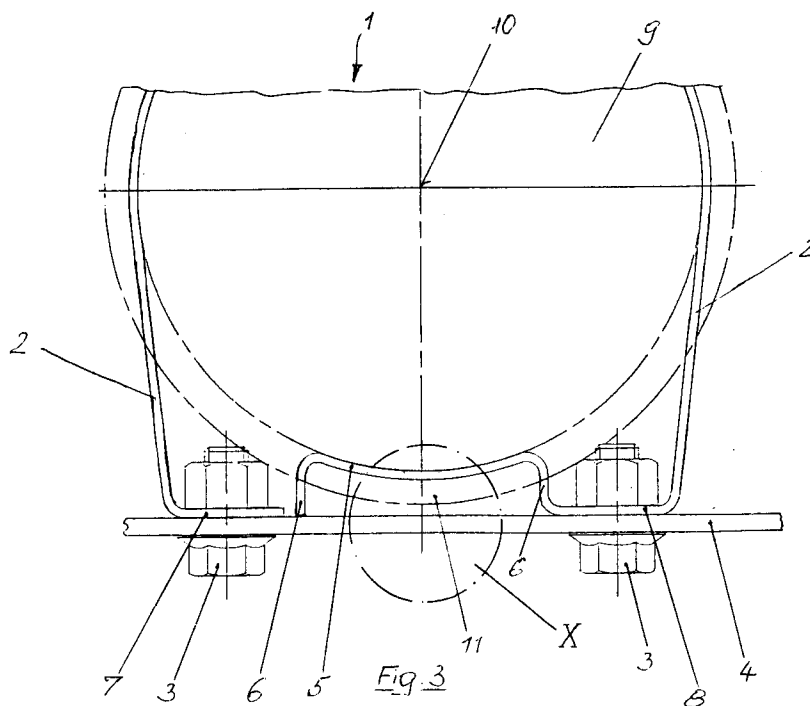
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I-10121 Torino (IT)(54) **Holding device for fastening containers of a round or an oval cross section.**

(57) A container fastening arrangement consisting of a one-piece simple tension band (2) is proposed for fastening a round or an oval container (9), one end of the actual tension band being formed as a support

surface (5). The other end encircles the container and clamps it against the support surface (5) or a stationary support body (4).

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The invention relates to a holding device for fastening containers of a round or an oval cross section on or to an essentially plane support body, with a tension band and a fastening screw.

According to the prior art pertaining to the company, a holding device of the above-mentioned type for fastening an oil container comprises a band-like angular support bracket between the tension band and the support body for the purpose of centring or positioning the container at the point of the support body which is to be fastened. The essentially U-shaped tension band comprises end clamping points with through-bores in order to screw the tension band together with the intermediate support bracket against the support body. When the holding device is screwed in position the oil container is fixed at the circumference against the angular support of the support bracket by the taut tension band. Two weld nuts without a clamping part are preferably used. If the container is attached together with the bracket, an opening must in many case be provided in the support body for the flange of the container.

The object of the invention is to improve the above-mentioned prior art by providing a holding device of the type initially mentioned which is constructed in a simple, compact and user-friendly manner, yet ensures that round or oval containers are reliably fastened.

The object on which the invention is based is solved by the features presented in the characterising part of claim 1.

The subject matter of the invention is developed in an advantageous manner by the features of subclaims 2 to 7.

The holding device for fastening containers of a round or an oval cross section consists of a single, simply constructed tension band, preferably of steel. One end of the band is formed to support the container against the attachment surface. The other end encircles the container and clamps it against the support or attachment surface. In order to fasten it to a bracket, one weld nut is preferably provided in the support area and another one on the tension band side for the purpose of clamping and securing the container. The holding device enables containers to be fastened to any plane surface. It consists of a total of three individual parts and in itself weighs little. As the support surface for the container to be fastened is an integral component of the tension band, there is no need for a weld joint between the two parts, as is the case when using a holding device according to the prior art. There is no need for an opening or recess in the support body to be fastened because of a projecting flange. The support body or attachment surface may be arranged horizontally, vertically or even "overhead". In the case of a horizon-

tal arrangement one fastening screw or weld nut at the leading free end of the tension band may be sufficient to tension the tension band, while the other weld nut on the other side in the area of the support surface is dispensable. The support surface and the associated vertical legs themselves provide an adequate vertical fastening hold through the weight of the clamped container bearing down.

The invention is explained in detail in the following on the basis of an embodiment and with reference to the accompanying drawings, in which:

Figure 1 is a diagrammatic front view of the holding device for fastening a cylindrical container before clamping,

Figure 2 is a diagrammatic side view of the holding device according to Figure 1, and

Figure 3 shows the holding device according to Figure 1 after being clamped to a container.

According to the drawings a holding device (1) for fastening containers (9) of a round or an oval cross section comprises a one-piece tension band (2) of steel and two fastening screws (3) or weld nuts.

The steel band is preformed in cross section approximately as shown in Figure 1. A particular feature lies in the fact that it comprises in its end area an integral support surface (5) for a container (9) to be fastened. The support surface (5) is basically adapted to a part of the outer contour of the container (9) to be fastened and formed in mirror-image fashion in relation to the longitudinal axis (10) of the container. The leading end of the support surface (5) of the tension band is in this case a support leg (6) extending essentially perpendicularly to the support body (4). Another support leg (6) is provided in a corresponding manner on the other side of the support surface (5).

The rest of the one-piece tension band (2) is essentially U-shaped, with an essentially horizontal, first flat clamping section (7) being formed onto the free end, which is to be clamped, of the tension band (2), which section serves as a base for a weld nut. Another flat clamping section (8) is similarly provided in the area of the support surface (5) on the other fastening side, which section also comprises a weld nut.

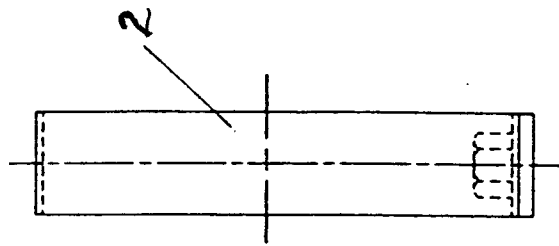
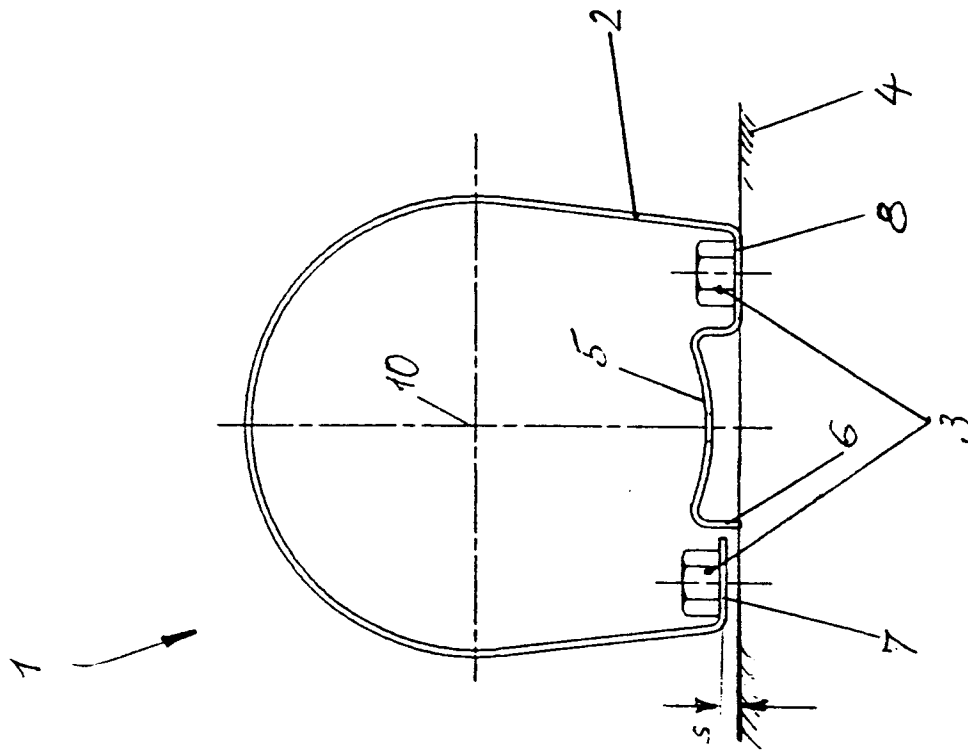
In order to mount or fasten an oil container or the like, the unfastened tension band (2) is placed around the container (9) to be fastened as shown in Figure 1, so that the container (9) bears down on the concave support surface (5) according to Figure 3. The tension band (2), including the support surface (5), is in this case supported on a horizontal support body (4) in the form of a bracket, which comprises through-bores for receiving fastening screws. Before the clamping process the fastening screw on the right-hand side according to Figure 3 is firstly inserted from below through the support

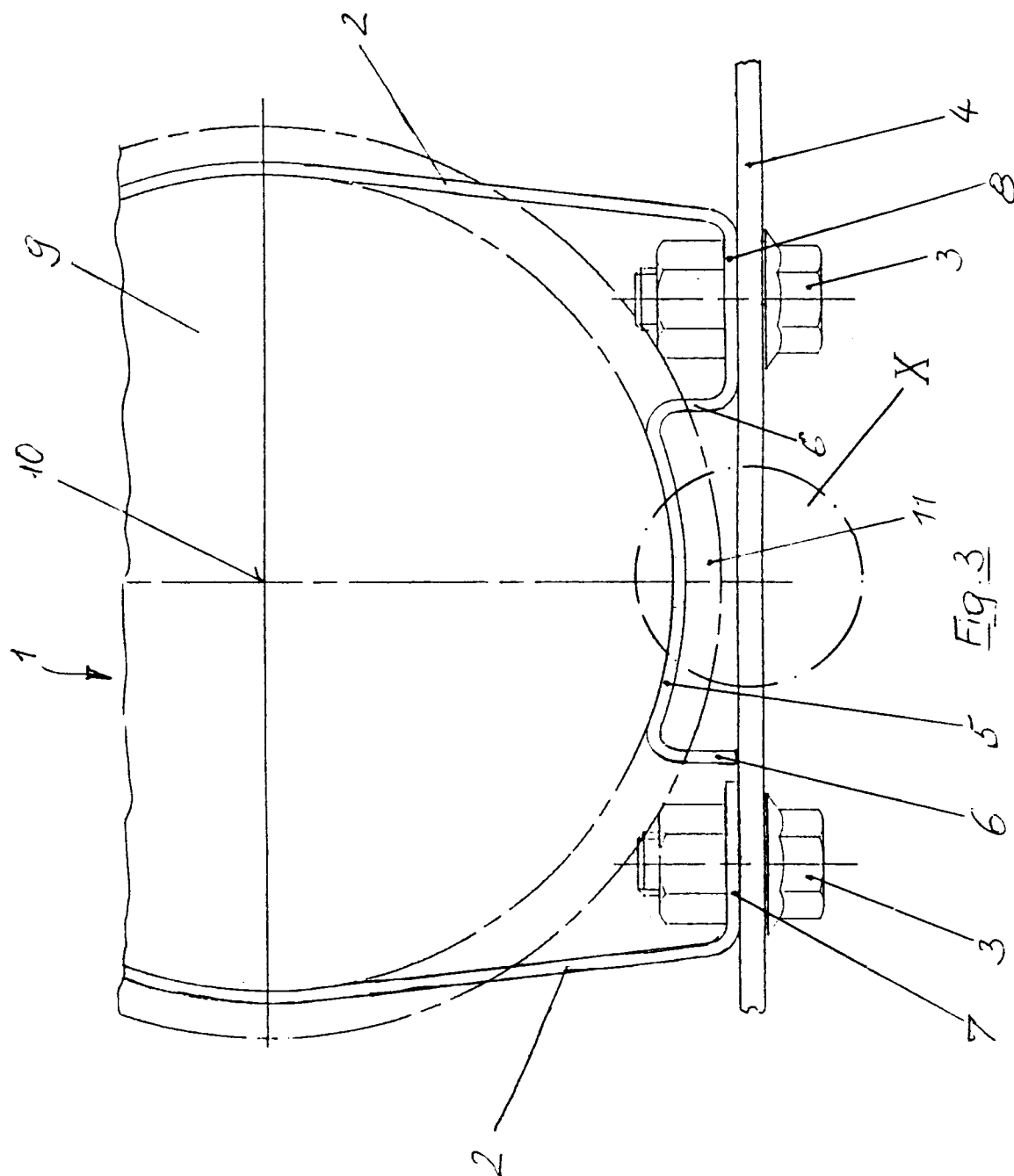
body (4) and firmly screwed into the associated weld nut. The two vertical support legs (6) bear down fully on the upper side of the support body (4). The fastening screw which is on the left-hand side according to Figure 3 is then inserted from below in the support body (4) until it engages in the associated weld nut at the free end of the tension band (2) according to Figure 1 and is clamped against the support body (4) by tightening the fastening screw further. In the process the free end of the tension band (2) moves through the tensioning distance (s) according to Figure 1. The container (9) is accordingly firmly clamped. As can be seen, the support legs (6) and the support surface (5) of the tension band (2) are formed on such that the flange (11) of the container does not contact the surface of the support body (4) in the area (X), i.e. there is thus no need to form an opening or recess in the support body (4) at the lowest point of the flange, as is the case, for example, according to the prior art.

All the novel features mentioned in the description and/or illustrated in the drawings, whether alone or in an appropriate combination, are essential for the invention, even if not expressly claimed in the claims.

Claims

1. Holding device (1) for fastening containers of a round or an oval cross section on or to an essentially plane support body (4), with a tension band (2) and a fastening screw (3), characterised in that one end area of the tension band (2) is formed as a support surface (5) for the container to be fastened.
2. Holding device according to claim 1, characterised in that the support surface (5) is adapted to the outer contour of the container to be fastened.
3. Holding device according to claim 1 or 2, characterised in that the support surface (5) is concave or wedge-shaped.
4. Holding device according to one of claims 1 to 3, characterised in that the leading end of the support surface (5) of the tension band is a support leg (6) extending essentially perpendicularly to the support body (4).
5. Holding device according to one of claims 1 to 4, characterised in that the support surface (5) is formed in mirror-image fashion in relation to the longitudinal axis of the container to be fastened.
6. Holding device according to one of claims 1 to 5, characterised in that the leading free end of the tension band (2) is formed as a flat clamping section (7), which is screwed against the support body (4) by means of a fastening screw (3) or weld nut when the holding device is in the clamped state.
7. Holding device according to one of claims 1 to 6, characterised in that another flat clamping section (8) is provided in the area of the support surface (5) on the side which is distant from the leading support leg (6), which section is screwed against the support body (4) by means of another fastening screw (3) or weld nut when the holding device is in the clamped state.







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EUROPEAN SEARCH REPORT

Application Number
EP 93 11 1225

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X A	US-A-3 802 655 (JEROME T. SCHUPLIN) * column 4, line 25 - column 6, line 13; figures * ---	1 2,3,4	B65D90/12
A	US-A-2 549 554 (RONALD M. WILSON) * the whole document * ---	1-5	
A	US-A-2 936 992 (HARRISON BROWNING) * the whole document * -----	3	
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			B65D F16B F16L
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17 November 1993	Examiner VAN ROLLEGHEM, F
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